Hunterian Lectures
ON
SYPHILIS,
AND ON
SOME LOCAL DISEASES AFFECTING PRINCIPALLY THE ORGANS OF GENERATION.

Delivered at the Royal College of Surgeons of England,

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LECTURE I.—PART I.

MR. PRESIDENT AND GENTLEMEN,—Those who have before me occupied this chair have so fully and so ably illustrated the different parts of the Hunterian Museum that I might well shrink from the task of attempting to add anything to their labours.

The object of these lectures, however, as it occurred to me, was to illustrate, as far as may be, the whole of Hunter's works; and in this view there appeared still some subjects which had engaged his attention, and upon which, in a practical point of view, we might with advantage even now occupy our time.

The natural and diseased structures, illustrated by the specimens in our museum, have been demonstrated in this theatre with an energy and talent that may not be surpassed; but with regard to the naturally fluid parts of the body and their diseases, and especially with regard to its diseased secretions, much still remains to be said. A wide field is here open to us—one which may, perhaps, be less attractive to the strictly logical mind than that in which every step may be demonstrated by preparations, which may be referred to year after year, but still one in which the knowledge gained is wonderfully productive in its practical applications. To the fluid parts of the body Hunter appears to have directed his especial attention, and this is particularly true with regard to the healthy and diseased secretions connected with the organs of generation. These fluids are not capable, like the more solid parts of the body, of being preserved, except in microscopic quantities, for continued illustration; yet are they instinct with the germs of life, and attracted the especial attention of him whose labours these lectures are intended to illustrate.

The real use of any fact in physiology, or of any anatomical or physiological preparation, is to illustrate some living action, and it was to this end that Hunter laboured, both in his dissections and writings; and, regarded in this light, every dissection and every fact has a reference to the whole life of the individual, and illustrates something with regard to that life. If we do not see this connexion, we are dealing with dead matter alone, and our studies are barren as regards living beings. This idea was present to the mind of Goethe when he put into the mouth of Mephistopheles—

> "Who would describe and study aught alive,
> Seeks first the living spirit thence to drive.
> Then are the lifeless fragments in his hand;
> There only fails, alas! the spirit-band;
> This process chemists name, in learned thesis,
> Mocking themselves, *Naturæ encheiresis.*"

Pope had the same idea when he wrote—

> "His principle of action once explore,
> That instant 'tis his principle no more;
> Like following life through creatures we dissect,
> We lose it in the moment we detect."

Two different schools have claimed Hunter as their disciple. It has been said by some that his strength lay in his powers of induction, by which he inferred respecting a whole class what he had ascertained respecting some individuals of that class; whilst by others it has been assumed that he had a wonderful faculty of deduction, by which, by an intuitive appreciation of certain principles with regard to healthy and diseased actions, he could apply those principles to other actions and diseases which he had not himself investigated. Thus Babington remarks, with regard to his investigation of the diseases which will hereafter chiefly occupy our attention, that Hunter's power of reasoning was scarcely on a level with his other faculties, but that the errors of his logic were perpetually corrected by the variety and accuracy of his experiments; that he sought to arrive at the general laws of nature at once by conjecture rather than by a close and detailed study of her inferior operations, to ascend step by step through a slow and gradual induction to those laws which govern her general procedure. Others again have claimed for Hunter that to him the characters of nature were legible, but that he, in the words of a great man, perceived they were not plain enough for those who run to read; that he was cautious, sometimes we might almost say timid, in his method of proceeding. *He* did not attempt to fly where he must first creep. In considering a complex subject, he examined every distinct ingredient, one by one; he reduced everything to the utmost simplicity. He examined principles by their effects, and afterwards the effects by their principles. He compared his subject with things of a similar nature, and even with things of a contrary nature, for he found that discoveries may be, and often are, made by contrast, which would have escaped him by a single view. The greater number of comparisons he made the more general and certain knowledge he obtained of the matter in hand, as being built upon a more extensive and perfect induction. If this method did not always preserve him from error, at least it preserved him from the spirit of error, and made him cautious of pronouncing with positiveness or with haste, when so much *labour* might end in so much *uncertainty*.

On the other hand, Mr. Green, in his "Vital Dynamics," has not hesitated to attribute Hunter's power of interpretation and insight to a *lux intellectus*, a *lumen siccum*, the pure and impersonal reason. "The discovery of any law of nature," he says, "has uniformly the character of felicity, and of a revelation, as by a flash of divine light, of the legislative wisdom of the Creator. By contemplating life as a law he laid the foundation of scientific physiology, and in that conception of a law he taught us that life is a power anterior in the order of thought to organisation, and that it continues to manifest itself in all the forms and functions of animated beings. This great idea never ceased to work in him as his genius and governing spirit; and if, in his printed works, the one directing thought seems occasionally to elude his grasp, yet, in the astonishing preparations in his museum, we find him constructing it for scientific apprehension out of the unspoken alphabet of nature."

How far these different criticisms are just we shall have some opportunity of judging. It is probable that Hunter was not conscious of belonging to any school, but that he felt a power working within him which it would have been exceedingly difficult for him to define.

With regard to our present subject, the object and aim of Hunter's life and the character of his mind is well summed up by Coleridge. He says:—"When we stand before the bust of John Hunter, or as we enter the magnificent Museum furnished by his labours, and pass slowly with meditative observation through this august temple which the genius of one great man has raised and dedicated to the wisdom and uniform working of the Creator, we perceive at every step the guidance, we had almost said the inspiration, of those profound ideas concerning life which dawn upon us indeed through his written works, but which he has here presented to us in a more perfect language than that of words—the language of God himself as uttered by nature. That the true idea of life existed in the mind of Hunter there cannot be the least doubt, but it may perhaps be doubted whether his incessant occupation and his stupendous industry in the service both of his contemporaries and of posterity, added to his comparatively slight acquaintance with the arts and aids of logical arrangement, permitted in many instances his *fully* unfolding and arranging it in distinct, clear, and communicable conceptions. Thus the light which occasionally flashes upon us seems at other times, and frequently, to struggle through an unfriendly medium, and even sometimes to suffer a temporary occultation. In order to dissipate the undeniable obscurities, and to reconcile the apparent contradictions found in his works, to distinguish, in short, the numerous passages in which, without perhaps losing sight internally of his own peculiar belief, he yet falls into the phraseology

and mechanical solutions of his age, we must distinguish such passages from those in which the form corresponds to the substance, and in which therefore the nature and essential laws of vital action are expressed as far as his researches had unveiled them to his own mind without disguise. To effect this we must, as it were, climb up on his shoulders and look at the same object in a distinctive form, because seen from the more commanding view furnished by himself."

That this description gives us a correct idea of Hunter's mind, and that in every dissection he made, and in every preparation he has left, he believed that he was investigating and illustrating the results of some living process, is, I think, shown by the fact that he summed up the labours of his life by his work on the blood. Hunter insists much on the living principle of the blood, and thinks that there is an analogy between the actions which we can trace in the blood itself and in other parts of an organised being. Without some such principle to guide us, he observes, we are dissecting a dead body, without having any reference to the living, or even knowing it ever had been alive. That the blood has life, he says, is an opinion that I have started for above thirty years, and have taught it for near twenty years of that time in my lectures. It does not therefore come out at the present time as a new doctrine. Although Hunter appears to have arrived at the idea that the blood is alive, from his own independent observation, and says that he had started the opinion, yet in truth it is as old as any writings which we possess. In the oldest Hebrew records the idea is vividly set forth, and many of the Hebrew ceremonies and rites would be unintelligible and unmeaning without the conception, stated in so many words, that "the blood is the life."

But, in truth, even in comparatively modern days, there were some who, before Hunter, attributed life to the blood. Some passages, in which Milton and Shakspeare attributed life to the blood, I have, with the aid of a friend, collected.*

This subject is one which may not be deemed out of place in the consideration of a disease in which it may be said with the utmost truth, that "the life of all the blood is touched." To the study of this disease Hunter applied the full energies of his mind, and the principles which he so long taught had reference to the life of the fluid as well as the more solid parts of the body. It will now be my object to trace some of his opinions, and see whether they have stood the test of time, and see how far he was correct in his conclusions.

Morbid poisons, he observes, are many, and have different powers of contamination. Those which affect the body either locally or constitutionally, but not in both ways, he called *simple*; those which are capable of affecting the body both locally and constitutionally he called *compound*; and hence we are bound to ask ourselves whether Hunter generalised too freely, or whether this principle which he laid down in his opening chapter on the venereal poison has not been fully confirmed by subsequent investigations. I am not aware, however, that any writer has commented on Hunter's words as applied to this disease, or has given him credit for this clear distinction, which I believe I may say is now wellnigh universally acknowledged.

A poison may affect only the part in contact with it, and may act either mechanically or chemically, or may affect the vital action of that part. Thus powdered glass acts mechanically, corrosive sublimate acts chemically, and the matter of cancer acts only on the living principle of the part. It has long been a tradition in the East that powdered diamonds and powdered glass make other poisons more active, or prepare a patient's system for the reception of those poisons. This the powder may possibly do in two ways: (1) by lacerating the mucous membrane of the stomach and intestines, so as to create an abraded and an absorbing surface; and (2) by causing the effusion of a small quantity of blood. We shall have several illustrations during the present lectures of the way in which the admixture of even a small quantity of blood increases the activity of some poisons. When this mode of poisoning is attempted, powdered diamonds is likely to answer better than powdered glass, because the glass may be reduced to a real powder; but the diamond dust, however minutely divided, still retains its sharp uninjured angles. In the late trial of the Gwikwar in India, the attempt to administer diamond dust was one of the points in the case for the prosecution.

Another mode in which a poison acts is upon the constitution of the individual. This constitutes it a morbid poison. As examples may be cited gaol fevers, and different forms of secondary inflammation where there has been no open wound.

A third form in which a poison may act is on the nervous system; and, as examples, Hunter cites the occasional effects of poisoned arrows, honey, mussels, nux vomica, and probably the bite of a mad dog, which produces no specific visible effect on the injured part.

Those poisons which are liable to affect the body both locally and constitutionally Hunter calls compound or *mixed*. This latter term, again, has been very extensively employed in modern times, although not exactly in the sense used by Hunter; but no one, as far as I know, has given Hunter the credit for having accurately laid down the different modes of action which it involves.

This mixed action is of two kinds—first, when it produces inflammation of the parts, and at the same time affects the whole constitution, as in the venereal disease; and, second, where a local disease, as the itch, is followed by some secondary complication, such as erysipelas; or like the jail fever, which acts first on the constitution, and may be followed by certain local diseases; or like the vaccine inoculation, which produces a local disease, followed by a general constitutional influence.

Some of these poisons do not affect the constitution until ulceration takes place, and a knowledge of this fact enables us sometimes very materially to modify or to prevent their general results. Each specific poison has its own latent period before it affects the constitution, but upon what this depends has not hitherto been determined.

Animal poisons, Hunter observes, act principally on living parts. Nothing shows the variety of animal matters more than the poisons. The blood may be considered as a fluid animal, because it contains all the parts which compose the animal, and the whole of the body is composed out of it; or, as a learned friend of mine has expressed it, the blood may be regarded as a living atmosphere intermediate between the external air and the internal organs. The solids which exist already must have the power of decomposing this fluid, according to the stimulus of each part, and on that the natural and morbid secretions depend.

Some animal poisons affect the skin by simple touch, as those belonging to certain sea insects, the ant, &c. The poisons produced by other animals cannot possibly operate unless conveyed into a wound which brings them in contact with the living principle. They will always act under such circumstances, but not when the cuticle is entire. This has over and over again been asserted with regard to the syphilitic poison, but Hunter, as we shall see, took a dif-

* "Wishing it so much *blood* unto your *life*."—*Pericles*, ii. 3.
"Even as my *life* my *blood* that fosters it."—*Pericles*, ii. 5.
"Their *blood thinks* scorn till it fly out."—*Cymbeline*, iv. 4.
"Consume not your *blood* with sorrowing."—*Pericles*, iv. 1.
"*Speech*, to stir men's *blood*."—*Julius Cæsar*, iii. 2.
"Higher than both in *blood* and *life*."—*Ant. and Cleop.*, i. 2.
"Lack *blood* to *think* on't."—*Ant. and Cleop.*, i. 4.
"Our bloods no more *obey* the Heavens."—*Cymbeline*, i. 1.
"Thou art poison to my blood."—*Cymbeline*, i. 2.
"Resolute acting of your blood."—*Macbeth*.
"This speech like iron through your blood."—*Much Ado*, v. 1.
"Only my *blood speaks* to you."—*Merchant of Venice*, iii. 2.
"Much sadness hath congealed your blood."—*Taming of the Shrew*.
"Thoughts that would thick my blood."—*Winter's Tale*, i. 2.
"Doth not thy blood thrill at it."—1 *Henry IV.*, ii. 4.
"The blood and courage."—*Henry VIII.*, i. 2.
"Heavy sorrows of the blood."—2 *Henry IV.*, iv. 4.
"Infect my blood with joy."—2 *Henry IV.*, iv. 4.
"My blood begins to flatter me."—*Henry V.*, v. 2.
"Or is your blood so madly hot."—*Troilus and Cressida*, ii. 2.
"Let thy blood be thy direction."—*Troilus and Cressida*, ii. 3.
"Roused his drowsy blood."—*Troilus and Cressida*, v. 5.
"Might fire the blood of ordinary men."—*Troilus and Cressida*, iii. 1.
"When grief and blood ill-tempered."—*Julius Cæsar*, iv. 3.
"That makes my blood cold."—*Julius Cæsar*, iv. 3.
"My breath and blood."—*Lear*, ii. 4.
"Affection, and value youthful blood."—*Rom. and Jul.*, iii. 5.
"O treason of the blood."—*Othello*, i. 1.
"Issuing *life-blood*."—*Merchant of Venice*, iii. 2.
"Infect the very life-blood."—1 *Henry IV.*, iv. 1.
"Draw life-blood from my heart."—1 *Henry IV.*, iv. 6.
"How couldst thou drain the life-blood."—3 *Henry VI.*, i. 4.
"My sword is the life-blood of thee."—*Henry VIII.*, iii. 2.
"To the quick, thy life-blood out."—*Titus Andron.*, iv. 4.
"Deadly pale,
Groaned out his soul with gushing blood infused."
Paradise Lost, Book x. l. 447.

ferent and more correct view, as will be illustrated hereafter, especially by case No. 8.

Animal poisons which require a wound before they produce their effects on other living animals are very active, producing immediate effects, and they act in proportion to the quantity of the poison used. Those which poison by the touch first produce a soreness, and some swelling and inflammation, which is of the adhesive kind, although the swelling is generally œdematous. Those which act externally and locally do not occasion swelling at any distance. They all appear to have their particular distance, unless increased by rubbing. The poisons inserted into the skin, on the contrary, produce sometimes a very extensive local effect, quite independent of any constitutional affection. The sting of a wasp or hornet, as I know practically, will produce in a couple of hours swelling, redness, heat, and pain over a surface larger than the palm of the hand. The natural poisons which produce constitutional effects also produce local actions, but these are not so fixed as those which produce local results only. Suppuration of the part to which the poison is applied rarely happens, but by absorption, this may sometimes happen, as in common buboes.

Morbid poisons, according to Hunter, probably arise from a diseased state of the body or part, and may originate either spontaneously or from the application of similar matter from another animal. They have all a period of incubation. Some of these poisons are lost, and some are losing ground daily, for want of frequent communication. Some of these act in a fluid state, and some in a state of vapour. The venereal poison requires contact, and affects generally those parts which are most frequently in contact. Some affect the secretions, so as to make them poisonous, as the saliva in the mad dog. *Some of these are local, and others both local and constitutional.* Some affect the whole system rapidly, but not so the venereal. Every part of the body is more or less susceptible of being affected by those poisons. There are three ways in which they may affect a living being: first, when the effect is always local, and never reaches the constitution; secondly, when the constitution alone is affected; and, thirdly, when the disease has both local and constitutional manifestations.

It may not be uninteresting to observe here that Hunter regarded cancer as a local disease which never reached the constitution, but I do not remember that his opinion was referred to in a late celebrated debate upon the subject. These principles of Hunter's I shall have abundant opportunity of illustrating during the present lectures. First, with regard to the local syphilitic sore, which, as I believe, never affects the constitution; secondly, where the constitution alone is affected, as in hereditary syphilis; and, thirdly, where a local disease precedes the constitutional manifestations. The effect of a poison is external and local when it affects only the cutis, as the itch. It may be also local and never reach the constitution when the patient contracts a poisonous disease which is capable of running into diseased action and communicating the same to others. As an example of this, Hunter gives the venereal disease; and if those who have written on this subject since his time had weighed his words, they must have come to the conclusion that he believed that there was a syphilitic poison which did, and one which did not, infect a patient's constitution. Here, again, I think we shall see that Hunter did not generalise too freely, and if those who followed him in his investigations had also remembered what he had said, much intricate confusion, much fierce controversy, and many a laboured volume both in French and in English might have been spared.

Hunter showed experimentally that every part of an animal had its own independent vitality, and that it would retain this vitality for a time after it was separated from the rest of the body. He removed the testis from one animal and placed it in the peritoneal cavity of another, and the testis lived independently, until it formed fresh connexions and became part of the animal into which it had been transplanted. In like manner, as illustrated by a beautiful preparation in our museum, he planted a tooth in the comb of a cock. The tooth maintained its independent vitality until adhesion occurred, and the vessels of the tooth communicated with those of the comb of the cock. In this preparation the vessels of one may be seen communicating with the vessels of the other. The healthy living actions commenced in one would be carried on in the other; or, to speak in accordance with the more modern physiological nomenclature, the bioplasts on one structure would continue their growth, their development, and their actions in the other. The healthy actions of the two would thus be in perfect sympathy; and not only may healthy influences be thus transferred from one part to another, but diseased actions may likewise be so communicated. The following cases mentioned by Hunter are in point:—

CASE 1.—A young lady had a tooth transplanted, and the tooth fastened extremely well. It continued firm for about a *month*, when the gum began to ulcerate, leaving the tooth and socket bare. The ulcer continued, and blotches appeared upon the skin, and ulcers also in the throat. The disease was treated as venereal, and the symptoms disappeared, but they recurred several times after very severe courses of mercury. She at last got well.

CASE 2.—A gentleman had a tooth transplanted, and the tooth remained without giving the least disturbance for about a *month*. The edge of the gum then began to ulcerate, and the ulceration went on until the tooth dropped out. Some time afterwards, spots appeared almost everywhere on the skin. He was put under a course of mercury and all disease disappeared. After an interval, the same appearances returned, with the addition of swelling in the bones of the metacarpus. He was now put under another course of mercury, more severe than the former, and in the usual time all the symptoms again disappeared. Several months after, the same eruptions came out again, but not in so great a degree as before, and without any other attendant symptoms. He a third time took mercury, but it was only ten grains of corrosive sublimate in the whole, and he got quite well. The time between his first taking mercury and his being cured was a space of three years.

CASE 3.—In the Medical Transactions of the College of Physicians of London, published in the year 1785, Dr. William Watson, at that time the vice-president of the Royal Society, gives an account of a young unmarried lady, about twenty-one years of age, who had a tooth transplanted into the socket of one of the incisors of the upper jaw. The new tooth fastened exceedingly well. It remained firm for a month, when her mouth became very painful. The gum became ulcerated, and part of the alveolar process was left bare. Before another month the ulceration occupied the whole space under the upper lip, between the teeth and nose. It extended likewise to the cheeks and throat. Blotches then appeared on her face, neck, and various parts of the body; several of these became ulcerated painful sores. After trying a variety of tonic medicines without benefit, two grains of calomel were ordered once or twice a day. She took about fourteen pills, when she was obliged to discontinue the use of the calomel on account of the griping and purging which it produced. During the time that she was taking the pills the ulceration of her mouth and cheeks did not spread, but were less painful, and of a milder appearance. The blotches on her face and body grew paler, and such of them as had ulcerated healed apace, and no new ones appeared. The mercurial inunction was now tried; but in ten or twelve days the griping and purging returned, and the ointment was discontinued. The good effects of the mercury were, however, Dr. Watson observes, very apparent. The blotches all disappeared; the ulcerations in her face and body completely healed, and those of the mouth nearly so. A portion of the alveolar process subsequently exfoliated, and ultimately the patient died.

Dr. Watson remarks that the progress of this disease not being impeded by the most powerful antiseptics, and its giving way to mercurials, even in small doses, cannot but suggest that the disease was truly venereal.

At the time that such cases as the above were recorded, had not the idea taken possession of some men's minds that absorption of syphilitic poison under the circumstances was impossible, the diseases described would doubtless have been assigned to their right cause.

In some of the cases care was taken to wipe the surface of the tooth before it was transplanted, and it was thought that, by so doing, every chance of inoculation would be prevented; but a brief reflection will show that such a precaution could not affect the living actions going on within the tooth. That syphilitic blood, or the germinal elements of the blood, may be conveyed from a diseased to

a healthy person is demonstrated by the following observations:—

CASE 4. (Recorded by Waller.)—A boy, fifteen years old, was inoculated with the blood of a syphilitic woman on the 27th of July, 1850. The inoculations were performed by means of a scarificator, and the blood was inserted into the wounds with a small piece of wood and with lint soaked in the blood. At the expiration of three days the scarifications were healed. On the 31st of August, thirty-four days after the inoculation, two tubercles appeared the size of peas, of a reddish pale colour, dry upon their surface, unaccompanied by pain or itching. These gradually increased, became united and covered with scabs. They were surrounded by a faint red areola. The base of the tubercles became firm, and lost their elasticity; their surface became covered by a thin brown crust. On the 15th of September these united tubercles had attained the size of the transverse section of a pigeon's egg, and were surrounded by a red copper-coloured areola. On the 1st of October, sixty-five days after the inoculation, and thirty-two days after the first appearance of the tubercles, an eruption of roseola appeared, and this was followed by stains over the patient's whole body, and by papules and tubercles, especially on the inside of the thighs and on the stomach.

CASE 5. (Recorded by Lindwurm.)—A patient seventy-one years of age, affected with an incurable ulceration of the face, was inoculated with the blood of a woman twenty-eight years of age, who was syphilitic and eight months gone in the family-way. The inoculation was performed by means of the ordinary instrument used for subcutaneous injections. No irritation followed this inoculation until four weeks afterwards, when a little red tubercle appeared on the inoculated spot. This gradually increased, became excoriated, and covered by a thin brown crust. It became as large as a franc-piece, surrounded by an inflamed areola, with a hardened base and raised edges. A week after this a neighbouring lymphatic gland became enlarged, and this was in its turn followed by well-marked general syphilitic symptoms.

CASE 6. (Recorded by Gibert.)—A patient affected with lupus of the face was inoculated with some blood taken from a large scaly patch, of a red copper colour, on the forehead of a syphilitic patient. This patch afforded no secretion. The inoculation was performed on Feb. 9th, 1859, on the upper and anterior surface of the forearm. On the 1st of April, fifty days after the inoculation, there was a red scaly papule, quite dry, on the inoculated spot, resembling in its characters the scaly patch from which the blood had been taken. This inoculated spot had commenced about a fortnight previously, and around this were some copper-coloured slightly raised stains. A painful gland, as large as a nut, was felt in the corresponding axilla.

On the 23rd of April there was a rash of roseola over the body, some scaly pimples on the anterior surface of the arms, and many scabs among the hair. Mucous tubercles also existed around the anus, and at the umbilicus. There was no disease of the organs of generation.

CASE 7.—Professor Pelizzari, in 1860, inoculated two students of medicine with the blood of a patient affected with constitutional syphilis. The results of these experiments were negative. On the 6th of February, 1862, he again inoculated Drs. Bargioni, Rosi, and Passagli, with the blood of a patient named A. T——, aged twenty-five, affected with constitutional syphilis, and who had not as yet been subjected to any specific treatment. The blood in this case was drawn with a new lancet from the cephalic vein. The patient was suffering from numerous confluent mucous papules on the left labium, towards the inferior commissure, corresponding to the point at which the primary lesion had appeared. There was in this situation a mucous tubercle developed upon the indurated cicatrix of a primary sore; or else the indurated primary sore had become transformed into a mucous tubercle. Mucous tubercles surrounded the anus. The inguinal glands were indurated and enlarged. A confluent syphilitic eruption existed upon the body, and there was enlargement of the posterior cervical glands. There were also pustules on the head. The blood was taken from the patient's arm, at a part where there was no sign whatever of any eruption. The arm of the patient was washed, and the surgeon washed his own hands. The bandage and vessel destined to receive the blood were new. As the blood was flowing from the cephalic vein, some of it was received on some lint, and this was placed on the upper part of Dr. Bargioni's left arm, where the epidermis had previously been removed, and three transverse incisions made. This point corresponded with the insertion of the deltoid muscle. The same operation was performed upon Drs. Rosi and Passagli; but in the case of Dr. Rosi the blood was already cold when it was applied, and in the case of Dr. Passagli the blood had coagulated.

After the lapse of twenty-four hours, upon removing the dressing, nothing was observed at the seat of the inoculation in Dr. Bargioni's arm except a slight crust formed by the effused blood at the seat of puncture. At the same time the dressing was removed from the arms of the other two physicians, and nothing was seen worthy of observation. Four days afterwards every trace of the different inoculations had disappeared.

On the morning of the 3rd March, Dr. Bargioni announced to Professor Pelizzari that in the centre of the inoculated surface he had noticed a trifling elevation which produced a little itching. Professor Pelizzari examined the arm, and found at the point indicated a small papule of a roundish form and of a dull red colour. There was then no induration at the base of the papule, nor any enlargement of the corresponding axillary glands. To prevent its being rubbed, it was covered with some dry charpie and diachylon. Professor Pelizzari examined it daily. On the eighth day the papule had augmented to the size of a twenty-centime piece. On the eleventh day it was covered with a very thin adherent scale, resembling silver paper, which upon the two succeeding days became denser and less adherent, and in its central part had commenced to crack. On the fourteenth day two axillary glands became enlarged to the size of nuts, and were movable and indolent; the papule remained indolent, but its sensibility was slightly increased. On the 19th, pressure upon the crust caused a small amount of sero-purulent matter to exude from beneath its edges, the pressure giving a little pain. The axillary glands had now become larger and larger, but continued indolent; there was no induration apparent at the base of the papule. On the 21st the scale was transformed into a true crust, which had commenced to be detached at its edges, and the part beneath was ulcerating. Slight induration now appeared at the base. On the 22nd the crust was detached, and a funnel-shaped ulcer presented itself, with elastic and resistent borders, forming an annular induration; these edges were swollen, adherent, and obliquely inclined towards the base of the ulcer, which was covered with a very small amount of secretion. The pain was trifling. Dry charpie only was applied. On the 26th the ulcer had extended itself to the size of a fifty-centime piece; it secreted more, and the surrounding induration was considerably increased. Up to the 4th of April this ulcer remained stationary, but at that date its base appeared to be granulating. The corresponding glands remained swollen, hard, and indolent. There appeared at this date trifling nocturnal pains in the head, and the posterior cervical gland became somewhat enlarged. On April 12th there appeared upon the surface of the body, particularly upon the sides of the chest and in the hypochondriac regions, spots of irregular form and of rose colour, unattended by any inconvenience to the patient. The glandular swellings of the neck were well marked. This eruption extended itself, and became more confluent during the succeeding days. No constitutional disturbance, heat of skin, nor pruritus, accompanied this eruption, which went on increasing for eight days. On the 20th the cervical glands had increased in size and were harder; the chancre maintained its specific character, and exhibited no tendency to cicatrisation. On the 22nd the colour of the eruption was decidedly coppery; small lenticular papules were now perceived to be mixed with the erythema; the edges of the chancre had begun to granulate. Mercury was now commenced.

On Thursday last a medical man consulted me with an indurated cicatrix on his finger. He had pricked himself some months previously in removing the eyeball of a patient whom he had some reason to believe was syphilitic. No attention was paid to the circumstance for some time, but then induration, followed by ulceration, appeared where the puncture had been made. After an interval an eruption on the skin made its appearance, and this had recurred several times. Upon examining the axilla, an enlarged indolent gland was detected, which had previously

escaped observation. A careful consideration of all the circumstances left little doubt on our minds that this was a case of the direct inoculation of syphilitic blood.

The principle illustrated in the foregoing cases—namely, that the blood of a syphilitic patient may, under certain circumstances, communicate the disease to another patient who has not previously had syphilis—had been demonstrated by Cases 1, 2, and 3, recorded by Hunter.

ON

RECENT IMPROVEMENTS IN THE DETAILS OF ANTISEPTIC SURGERY.

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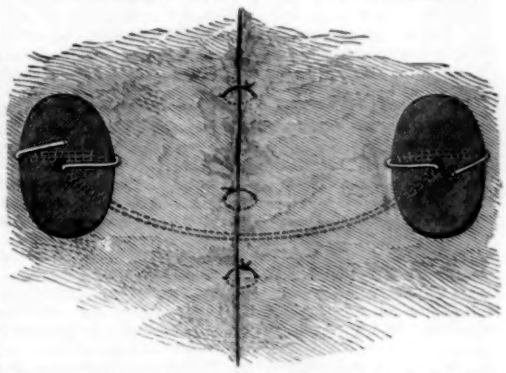
(*Continued from p. 719.*)

BORACIC ACID may also be sometimes used with advantage in the form of an ointment, for which I would advise the following mode of preparation:—Take of boracic acid, finely levigated, one part; white wax, one part; paraffin, two parts; almond oil, two parts. Melt the wax and paraffin by heating them with the oil, and stir the mixture briskly along with the boracic-acid powder in a warm mortar till the mass thickens. Then set it aside to cool, after which it will be found to be a pretty firm solid mass, which is to be reduced to the proper consistence of a uniform ointment by rubbing down successive portions of about an ounce each in a cold mortar. This ointment, when used, is spread very thin upon fine muslin or linen rag, which absorbs more or less of the almond oil and leaves a layer of blended wax and paraffin, flexible at the temperature of the body, and separable from the skin with the utmost ease by the discharge, which is thus not at all confined by it, but diffuses itself and flows out beneath it, receiving as it goes an abundant supply of the acid to prevent putrefaction, while cicatrisation is not materially interfered with by the mild antiseptic, and still less by the perfectly bland wax and paraffin.

A good example of the value of the boracic ointment was presented by a case of large rodent ulcer of the face lately under my care in the Edinburgh Infirmary, and treated by excision. The disease involving a large extent of the cheek, both eyelids, both nostrils, a considerable portion of the upper lip and part of the lower one, it was impossible to cover the raw surface by a plastic operation. It was therefore of great importance that efficient antiseptic means should be employed; for there is no more simple or more striking illustration of the value of this principle of treatment than the entire absence of inflammatory disturbance around an open wound when putrefaction is really prevented from taking place in it; the "stimulus of necessity" of John Hunter being, in truth, simply the stimulus of putrefying substances, so that the danger which usually attends open wounds is entirely avoided by efficient antiseptic measures.* But whatever might be the material employed for this purpose, it was inadmissible to interpose a protective layer between it and the raw surface; for this would simply have had the effect of conducting septic fermentation over the entire wound from the sources of putrefaction present at the mouth and nostrils. Seeing, then, that the antiseptic must be applied directly to the divided tissues, it was of course desirable that it should be as mild as possible consistently with its efficiency; and for a situation like this the boracic ointment was much better adapted than the moist boracic lint, the fine cloth spread with it applying itself with facility and accuracy to the irregularities of the surface, and keeping its position without any retaining means except a packing of unprepared gauze applied over it to absorb discharge, and retained by a bandage of the same light material.

The eyeball, left bare by the operation, was protected from contact with the dressing by having the loose skin above the upper eyelid drawn down over it by means of the "button suture," as I may term a form of "stitches of relaxation,"† which I have used for nearly two years with great advantage. It consists of two oval pieces of sheet lead, about one-twentieth of an inch thick, with a central perforation to receive a moderately thick silver wire. The silver wire is first passed as an ordinary suture, except that it is carried at an unusually great distance from the edge of the wound, both as regards surface and depth; each end of the wire is then passed through the hole in the corresponding lead button, and secured by being wound once round the shorter diameter, as shown in the accompanying sketch.



The two buttons thus take the place of the tips of two fingers of the two hands in giving support to the deeper parts of the wound, while leaving the cutaneous margins entirely free; and when the wound is at all extensive several pairs of buttons are applied in this way, constituting a sort of interrupted quilled suture. By their means the lips of a wound which otherwise could not be got to meet without considerable tension will often lie in contact of their own accord, any number of superficial sutures being added that may seem desirable to keep the edges of the skin in accurate apposition with a view to primary union.

The larger the surface which the buttons present to the skin the greater is their hold upon it, and the less, consequently, is their liability to glide and allow the wire to cut through the tissues by ulceration. When the circumstances of the wound allow them to be used as large as they are represented in the sketch, as after removal of the mamma, it will probably be found, when they are removed after the lapse of a week or ten days, that the buttons still occupy precisely the same situations that they were originally placed in, the surface beneath them being slightly depressed, but, in consequence of the diffusion of the pressure, not ulcerated, and this even in cases in which, a large amount of skin having been sacrificed, they have been made to exercise a degree of traction which without experience would seem inadmissible. But much smaller buttons, though less perfect in their action, will often be found of great value in small wounds, as, for example, after the operation for hare-lip, where they take the place of strapping, but work much more effectually and also much more conveniently, as they leave the cutaneous margins free from compression and open for inspection. Here, indeed, at the upper part of the wound the small size of the buttons is attended with little disadvantage, because, being applied to the alæ of the nose in planes nearly perpendicular to the direction of the wire, which perforates the tissue deeply below the septum narium, they cannot glide at all upon the surface, but, retaining their position perfectly, prevent in a very satisfactory manner the stretching of the uniting tissue at the nostril which is so prone to occur under strapping. In this particular situation, therefore, the only disadvantage of the necessarily small size of the buttons is that, their pressure being con-

* To this statement it is necessary to make an exception with regard to erysipelas, which I have known to appear in some surgical patients from whose wounds, as far as I was able to judge, all fermentative agency from without had been excluded. But, except during an epidemic of this disease, such as prevailed in Edinburgh about two years and a half ago along with a virulent outbreak of small-pox, the chance of its occurrence under strict antiseptic management is so small that it scarcely needs to be taken into consideration.

† The importance of special stitches of relaxation—"Entspannungs Nähte"—was, so far as I am aware, first pointed out by Professor Simon, of Heidelberg, in his important work on Vesico-vaginal Fistula.

centrated on comparatively small portions of the skin, they will be liable to cause patches of superficial ulceration if the traction upon them should become increased by inflammatory turgescence. But if this threatens to occur, either in this particular wound or in any other, the difficulty is readily got over by unwinding the wire from one of the buttons, and, after straightening it, allowing the button to slip upon it to any degree to which the tension disposes it, and then fixing it again by winding the wire round it. And, conversely, if the support of the buttons is still required after they have become slack from any cause, they can be braced up at pleasure to any requisite degree.

Even when the edges of the wound cannot be made to meet at all, the extent of the exposed tissues and consequent granulating surface and cicatrix may be greatly reduced by the use of the button stitches, as was illustrated by the case of rodent ulcer which we are considering, where a single pair of buttons being applied, one to the skin above the eyelid and the other to that over the lower border of the jaw, the connecting wire lying exposed on the raw surface, the integument thus drawn down formed a permanent covering for the eyeball.

To return to the effect of the antiseptic dressing in this case. It was beautiful to witness the entire absence of inflammatory disturbance in this large open wound, involving such exquisitely sensitive parts, the surrounding skin remaining free from day to day from any inflammatory blush or puffiness, and the patient experiencing absolutely no uneasiness after the smarting* which immediately followed the operation had subsided, as it did within a few hours of its performance. On the changing of the dressing, which was done daily during the earlier periods, the entire mass came off like a mask, without adhering in the least to the wound, while there was no accumulation whatever of the discharge, which constantly passed freely out into the porous mass arranged to absorb it; and there was never observed the faintest putrefactive odour. Cicatrisation also proceeded satisfactorily from all parts of the edges of the wound, and it was an interesting circumstance that, while the epithelial ring which was thus formed had, in the greater part of its extent, the denseness and opacity of an ordinary scar upon the skin, the portions in the vicinity of the upper lip and nostrils had a peculiar delicacy and transparency, allowing redness of the subjacent vascular structures to show so distinctly that, except for their smoothness and dryness, these parts of the cicatrix might have been mistaken for unhealed granulating surface. The explanation obviously was that the epithelial formation, taking place only as the offspring of pre-existing epithelium, partook of the character of that from which it grew, having the density and opacity of epidermis when it sprang from the edges of the skin, but possessing the delicacy of the epithelium of the interior of the lip and nostril when, the skin of those parts having been all removed, cicatrisation proceeded from the margin of the mucous membrane. Ultimately there was about one inch in breadth of the lower portion of the scar which presented these peculiar characters; and the mucous cicatrix would doubtless have been more extensive had I not supplied centres of epidermic growth over the general surface of the sore by skin-grafting.

The mode in which this was done deserves a moment's notice. As cicatrisation was proceeding so satisfactorily under the boracic ointment, I thought this application might perhaps prove not inconsistent with the preservation of the vitality of skin grafts, so that the advantage of the procedure might be obtained without putrefaction occurring in the sore, as would be the case if the surface were covered with protective. I accordingly conducted the little operation in the manner that has been described in an earlier part of this paper, except that as each graft was laid down I placed upon it a morsel of the fine rag spread with the ointment, a general piece being afterwards applied over all to cover in the whole sore. But, to my disappointment, it turned out that not a single graft took. The ointment, though so mild in its action as not to prevent cell growth from epithelium which retained its connexions with its living neighbours, was yet too strong for the portions of epidermis which were weakened by isolation, and, before they had time to unite with the granulating surface, operated upon them as an irritant or as a caustic. I therefore repeated the process with this difference, that each graft, when placed upon the sore, was covered with a very small square of the oiled silk protective dipped in boracic lotion, and over this a rather larger square of the fine cloth spread with the ointment, a large piece being afterwards applied to cover the whole. Thus each graft was protected from the direct action of the boracic acid in the ointment, while the bits of protective were everywhere so overlapped by the antiseptic layer as to prevent putrefaction from entering. The result of this procedure was that every one of the numerous grafts adhered, and the healing of the sore proceeded to its completion with much greater rapidity, and I believe with much less contraction of the scar, than would otherwise have been the case.

In plastic operations such as those for the repair of the lower lip, the deeper edges of the wound communicating with the buccal cavity with its septic contents, any sort of antiseptic treatment may at first sight seem altogether out of place. But the primary union between the cut surfaces, which may be reckoned on almost as a matter of certainty if the operation has been so conducted that the edges of the wound can be brought together without tension, prevents the spread of putrefactive fermentation outwards from the saliva and buccal mucus. For it would appear that the living tissues of the cut surfaces, provided that their vital energies are not impaired by inflammatory disturbance, operate upon a thin layer of blood or lymph (fibrine) between them in the same sort of way as the mucous membrane of a perfectly healthy urethra acts upon the mucus or residual urine contained in it, as before alluded to in connexion with the case of hypospadias: that is to say, the healthy living tissues prevent the development of septic organisms in their immediate vicinity; and this I believe to be the explanation of the possibility of primary union without antiseptic treatment. Thus the process of primary union is a sort of natural antiseptic arrangement so far as the materials between the cut surfaces are concerned; and hence it is quite reasonable to employ external antiseptic means after a plastic operation in such a situation. And, in point of fact, it will be found well worth while to apply a strip of fine rag spread with boracic ointment sufficiently broad to cover the lips of the wound and the points punctured by the sutures, retaining it in position by a somewhat broader strip of unprepared gauze, with its edges glued down with collodion. The result is, that, the surface being kept moist and at the same time free from putrefaction, the occurrence of the troublesome pustules which are so often seen under scabs in the line of incision or about the stitches is prevented, and the union along the cutaneous margins, which it is so important to secure, is attained with much greater certainty and perfection. The ointment should not be applied till oozing of blood has ceased; and until this has occurred, the wound is kept covered with a piece of boracic lint.

I need hardly remark that to operate under the spray when the wound communicates with the septic buccal cavity would be an absurdity. The use of carbolic lotion should also be avoided, on account of the irritation which it occasions to the tissues. There is, however, no objection to having the sponges rendered pure by wringing them out of the mildly acting boracic lotion.

In operations of this kind silver wire for the deeper stitches and horsehair for the superficial ones answer extremely well; the rigidity of the wire enabling it to give valuable support, while both these kinds of material are mechanically antiseptic, since they afford no nidus for putrefactive fermentation in their substance, and both are so smooth in surface as to be in that respect quite unirritating. For microscopic examination of horsehair shows that its external epithelium, unlike the imbricated arrangement which prevails in many hairs, such as those of the mouse or of the human head, is so arranged as to produce perfect smoothness, a circumstance which is probably further valuable from the facility with which adhering dust can be removed.

One other use of the boracic ointment remains to be mentioned—namely, as a substitute for oiled silk protective in cases attended with inevitable putridity of the discharge from the interior of the part concerned; as, for example, after excision of a joint on account of caries attended with sinuses, where the injection of chloride-of-zinc solution has

* This smarting was probably chiefly due to the effect of the solution of chloride of zinc, which, as an additional precaution, I had applied to the parts of the wound in the immediate vicinity of the mouth and nostrils.

failed to eradicate the septic condition of the interior. Under such circumstances, though it is not impossible to prevent putrefaction, it is very desirable to mitigate it, both for the sake of the part itself, and still more in order to avoid as much as possible the contamination of the atmosphere of the ward or sick chamber. But if oiled silk protective is applied beneath the antiseptic gauze, or dry boracic lint employed, the putrefaction present in the pus effused beneath it will continue to advance unchecked; and unless the dressing be changed daily, the oiled silk will acquire a very foul and irritating character. And even a dressing of wet boracic lint applied next the wound and covered with gutta-percha, though it answers the purpose much better, may become very putrid in the course of forty-eight hours, in consequence of the pus accumulating beneath it and so eluding the action of the acid. But if a piece of fine cloth spread with the boracic ointment is substituted for the protective, the discharge, compelled to diffuse itself in a thin layer beneath the ointment, continually receives from it a supply of the acid, which corrects more or less its original putrefaction; and the result is that after the lapse of two or even three days, the fetor is much less than it is in twenty-four hours under oiled silk protective or water dressing; and thus, while the atmosphere of the apartment is kept comparatively pure, the patient and the surgeon are saved the disadvantages of needlessly frequent dressing.

(To be concluded.)

THREE CASES OF EPILEPSY,

ILLUSTRATIVE OF THE INFLUENCE OF DEPRESSING PASSIONS IN EXCITING, AND THE VIRTUE OF BROMIDE OF POTASSIUM IN CONTROLLING, THE DISEASE.

By SURGEON-MAJOR G. YEATES HUNTER,
BOMBAY ARMY.

NOTWITHSTANDING patient investigation by eminent pathologists into the nervous structures of fatal cases of epilepsy, with a view to discover morbid changes, it must be confessed that little light has been thrown upon its pathology, and little advance has been made in our practical knowledge. Indeed, the whole subject is environed with difficulty, and our acquaintance with the physiology and morbid anatomy of the disease is in an extremely unsatisfactory state. The general conclusion arrived at that the condition of the nervous system which is expressed in epileptic convulsions is one of exhaustion, set up by some agent which in some way or other closes the small vessels, and so cuts off the supply of blood to the nervous centres, is useful in so far as it arrests the attention and fixes it upon the practical point, that, since it is a disease depending upon debility, it calls for food to restore, and a drug to calm the irritability which so surely accompanies an exhausted state.

There is no constant change in the shape of lesion, or otherwise, discoverable; and whether the morbific agent, whatever it may be, is prepared in the laboratory of the nerve-cell, instead of proper and healthy nerve force, until, accumulating, it is discharged, with poisonous effect, upon the nerve-tissue, overwhelming it at once, or whether it mechanically starves the brain by exciting contraction of its vessels, is a mystery which eludes solution, and will probably continue to baffle us.

Although I have given considerable attention to the disease, I do not now propose to enter upon the vexed question of its etiology, but rather, in what may appear an empirical mode of procedure, to invite attention to one powerful cause of, and one valuable remedy against, the disease.

CASE 1.—R. R——, aged thirty-seven, an engine-driver, was admitted into the hospital of the House of Correction at Bombay, under my charge, on Aug. 23rd, suffering from epileptic convulsions, which he had never experienced prior to that date. From his previous history, furnished by those who knew him well, I gathered that he was a native of New Brunswick, had enjoyed fair health, was well conducted and of regular habits, neither drinking nor smoking to excess; that he had lived in India ten years, and been employed on the railway, where he bore a good character. In this case the disease came on suddenly, without previous indisposition; the attacks were frequent and severe (the patient being violently convulsed for from ten to twelve minutes for the first seventeen days), but afterwards diminishing both in severity and frequency. During the thirty-eight days his illness lasted he had in all 191 attacks, giving an average of five per diem. There were warnings by hot aching head, tightness across the forehead, and oppression of the chest, when he would put his hand to his brow and fall back convulsed; occasionally it was practicable to arrest the fit by the inhalation of chloroform. The bowels were not costive—indeed, throughout there was no constipation; still alterative medicine was given at intervals to correct the secretions, and on admission an emetic was thought expedient. The remaining treatment consisted in good nourishment and stimulants, together with tonics (cod-liver oil and iron), to repair waste and restore nervous energy, and bromide of potassium to soothe irritability, which is the sure consequence of exhaustion, however induced. One drachm of water takes up half a drachm of the bromide; and two drachms of this saturated solution were given three times daily. Chloral was also tried at night to compose the patient, who, before taking it, slept badly, the effect of the chloral being to ensure four or five hours' sleep; but when he awoke, two or three fits would occur in rapid succession, to make up, as it were, for lost time, the chloral thus seeming to postpone, but not to otherwise modify, the attack. Spinal uneasiness was noticed, and turpentine stupes gave ease; the ice-bag clearly did harm, and galvanism was of doubtful efficacy.

There can, I think, be little doubt that bromide of potassium was of great service in this case; after the first two or three days the soothing effect of the draught was apparent, and the sufferer was invariably anxious to get it. The last convulsion occurred on the 28th of September; and the man was discharged, apparently well, on the 7th of October, between six and seven weeks after admission.

I may add that there was no history of hereditary tendency, and I could discover no cause to account for the disease beyond melancholy. The patient was watched and tended night and day, so that masturbation would not have escaped notice. This would appear therefore to have been a genuine case of epilepsy set up by brooding over trouble. The man was intensely melancholic, often in tears, at the idea of his helpless wife thrown on the world without resources; he slept little; lost weight; and his nervous system became quite worn out, and thus more susceptible to succumb to the occult influence over the nervous system which results in epilepsy.

CASE 2.—H. H——, aged thirty-three, had suffered from epilepsy, more or less, for years, rarely passing a month without an attack, of which there were usually warnings by swimming in the head and deadly faintness. He is decidedly of melancholic temperament, but beyond this and an appearance of delicate health there was nothing to be gleaned from his history to account for the disease. All care was paid to the general health and strength of this patient: diet was regulated, but on a liberal scale, the secretions were attended to, and meanwhile a saturated solution of bromide of potassium was prescribed, as in the first case, with the result of a marked diminution in the number and severity of the fits. As time passed on he could beat off the enemy (which always gave him notice) if he took a dose. The only fit last year was on an occasion when, although having due warning, he did not use the remedy, having omitted to carry it with him. The last threatening, now six months back, was whilst attending the funeral of a child; the feeling of being about to faint was experienced, when he instantly swallowed a dose, and the attack was averted. In this case I consider that, predisposed as he was by temperament, the sorrow natural to the occasion was sufficient to excite an attack.

In neither of these cases did trembling of the hands result as a sequel to the treatment by large doses of the bromide.

CASE 3.—This was a case of a woman aged twenty-four, committed for trial on the charge of attempting to make away with her infant, and which, according to her account, was born and dropped while she had a fit on the stool. I

saw her soon after her admission into the Bombay County Jail in a true epileptic seizure, which was extremely violent and prolonged, leaving her bruised and helpless for hours. She was unmistakably melancholic and weak, but otherwise there was nothing in her history to explain the occurrence of the disease which she suffered from every twelve or fifteen days, and which seemed totally disconnected with menstruation. She was put under a course of the bromide, a liberal diet was allowed, and her functions were attended to. Soon after commencing the treatment she had a fit in the High Court, whilst under examination (dropping the child she was originally charged with dropping), and becoming violently convulsed. The case was necessarily adjourned, and treatment was persevered with. After a short interval she again attended the court, when the emotion, although just as strong as before, did not induce a fit. I cannot speak so positively of the favourable action of the bromide in this case, because the charge against the woman fell through, and I lost sight of her.

I am fully aware that many points arise in these cases which admit of controversy. They are not adduced as proving anything; they are simply tentative, and are reported more for the sake of drawing attention to the subject, and inviting discussion, than of clearing up the question of etiology or treatment. Still, I think there is enough similarity to justify me in grouping them together, and sufficient ground for concluding that a strong and absorbing depressing passion may excite, and that bromide of potassium will calm, that peculiar irritability of the nervous system of which convulsive movements are the outward manifestation.

Bombay.

THIRTEEN CASES OF LITHOTOMY.

BY G. HEATH, M.B. LOND.

THE accompanying table gives the result of thirteen lithotomies, the whole number performed by me in public and in private practice during the period given in the table. The number is not large, as it is spread over a little more than eighteen months. The whole number recovered, and the majority in less than the usual time. The patients were all males; the ages varied from three to sixty-six years; and the smallest stone weighed 15 grs., the largest 354 grs. The greatest number of days of treatment was seventy-four, the least eleven; but in this case the wound was not absolutely cicatrised. The patient, however, operated upon in the infirmary, was able to leave that institution and travel to his home—a distance of nine miles. In two cases—Nos. 5 and 9—the median operation was performed; in the others the ordinary lateral operation. In all a tube was used.

The greater number of the cases do not require any individual notice; it may be interesting to say a few words concerning others.

CASE 5.—This patient was a stout, big man, and had been, for some time before I saw him, under treatment for enlarged prostate and irritable bladder, with purulent urine. On sounding, it was ascertained that there were more stones than one, and, as these were considered to be small, lithotrity was determined upon. So much constitutional disturbance and irritability of the bladder, with increase of pus in the urine, followed the examination, although very carefully conducted, that the crushing operation was given up, and median lithotomy, which I had before found useful in the extraction of foreign bodies from the bladder, resorted to. The membranous part of the urethra was opened, the apex of the enlarged prostate only incised; the finger then passed easily into the bladder, coming upon three stones lying together behind the gland. These were picked out in succession by somewhat small flat-bladed forceps. Each stone was flat, circular, about half an inch in diameter, with a thickened rim round the edge. They were found afterwards to consist of urate of ammonia, and to weigh together 60 grs. The recovery was excellent. No urine passed by the wound after forty-eight hours. In a week the patient was out of bed, and soon left home for change of air.

CASE 10.—Lithotomy is not usually, I think, an operation attended by much bleeding, but in this case the hæmorrhoidal and transverse perineal arteries bled profusely, so that some eight ounces of blood were lost during the short time occupied by the operation. The bleeding was easily stopped by plugging the petticoat of the tube and raising the patient's hips, but I was a little anxious about the result. This patient was a nervous delicate man, a schoolmaster, and had suffered a good deal from his complaint for some time. The stone measured 1¾" in its long diameter, 1¼" in its short; the greater circumference was 4¼", the less 3¼". It was found to be phosphatic. The patient left the infirmary on the eleventh day.

CASE 3 was longer under treatment than any other. The rectum was very large, and formed a pouch projecting anteriorly. This was cut during the operation to the extent of about half an inch, and the healing of the wound delayed in consequence. The after-treatment in this case was skilfully and carefully conducted by Dr. Callender, of Haydon Bridge.

CASE 11 presented a very deep perineum, the finger only just reaching the prostatic wound. The stone (uric acid) weighed 320 gr., and measured—long diameter, 1¾"; short diameter, 1⅜"; great circumference, 4"; less circumference, 3½". The healing was complete on the fifteenth day.

This case and No. 9 were carefully attended after the operation by Dr. McClarens, of Bedlington, who also assisted me in the operations.

CASE 12.—Here also there was a very deep perineum, and the extraction of the stone was somewhat impeded by its

Tabular Statement of Dr. Heath's Thirteen Cases of Lithotomy.

Case.	Sex.	Age.	Date of Operation.	Date of Result.	Nature of Result.	Number of Stones.	Weight of Stones.	Composition of Stones.
1	Male	10	17th May, 1873	31st May, 1873	Cured	1	120 grains	Phosphates
2	,,	3	17th May, 1873	10th June, 1873	,,	1	15 grains	Oxalate of Lime
3	,,	60	19th July, 1873	30th Sept., 1873	,,	1	120 grains	Oxalate of Lime
4	,,	9	6th Oct., 1873	18th Oct, 1873	,,	3	131 grains	Uric Acid
5	,,	69	26th May, 1874	9th June, 1874	,,	3	60 grains	Urate of Ammonia
6	,,	8	9th July, 1874	23rd July, 1874	,,	1	160 grains	Urate of Ammonia
7	,,	7	18th Aug., 1874	17th Sept., 1874	,,	1	50 grains	Oxalate of Lime
8	,,	16	1st Oct., 1874	30th Oct., 1874	,,	1	206 grains	Oxalate of Lime
9	,,	36	13th Oct., 1874	27th Oct., 1874	,,	1	60 grains	Phosphates
10	,,	43	3rd Nov., 1874	13th Nov., 1874	,,	1	291 grains	Phosphates
11	,,	60	21st Nov., 1874	4th Dec., 1874	,,	1	320 grains	Uric Acid Small quantity of Phosphates
12	,,	64	22nd Dec., 1874	20th Jan., 1875	,,	1	354 grains	Uric Acid; Urate of Ammonia Phosphates
13	,,	58	26th Dec., 1874	10th Jan., 1875	,,	1	160 grains	Phosphates

Cases 1, 2, 4, 7, 8, 10 were operated upon in the Newcastle Infirmary.
In Cases 7, 8, 9, 11, the wound was completely healed. In the other cases the wound was not quite skinned over, but the patients were no longer under treatment.

peculiar shape—flattened and circular—measuring 1¾″ in each diameter, 3¾″ in great circumference, and 3½″ in less circumference, so that it could not be humoured in its passage through the wound. This patient suffered from swelled testicle during the third week after the operation, and was twenty-nine days under treatment.

The cases of median operation have given me a favourable impression of that procedure where the stone is of such a size that no dilatation of the neck of the bladder is required; in these cases the least injury possible was inflicted upon the patients, the neck of the bladder being neither cut nor bruised, and they were left in the most favourable position for recovery.

It is very different where the stone is large and cannot be extracted without forcible dilatation of the neck. The statistics of the Norwich Hospital show that the median indiscriminately practised gives a higher rate of mortality than the lateral operation.

In conclusion, I may observe that this table gives a fair sample of the results which I have hitherto been fortunate enough to obtain in my practice of lithotomy, and not in any sense a picked or exceptional series of cases. It confirms, so far as it goes, an opinion which I ventured to give some time ago—that lithotomy is one of the operations which is more successful in the present day than it was fifty years ago.

Newcastle-on-Tyne.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

CASE OF SUPPURATING HYDATID CYST IN THE THIGH; DEATH; AUTOPSY; CLINICAL REMARKS.

(Under the care of Mr. FRANCIS MASON.)

FOR the notes of this interesting case we are indebted to Mr. Reginald Maples, the dresser.

The patient was a strong, healthy-looking man, aged forty-five, who was admitted August 27th, 1874. He stated that he was quite well until two years before admission, when he felt a slight pain in his left femoral region. He remembered that at that time, when he was stooping, he hurt himself with a purse he had in his trowsers pocket, and soon afterwards he noticed a swelling, about the size of a walnut, which increased slowly but steadily. Three months before he sought advice the tumour suddenly got much larger. It never gave him any distinct pain, and his chief anxiety was a swelling of his foot and leg.

On examination, a distinctly fluctuating tumour, about the size of a fœtal head, was found situated in the left Scarpa's triangle. The circumference of the thigh at the most prominent part of the swelling was twenty-six inches, while the measurement of the other limb in the corresponding situation was twenty-three inches and a half. The size of the swelling remained unaltered, whether the patient was standing or recumbent. There was no impulse on coughing. He could bear his weight on the affected limb. There was no tenderness in the spinal region, and pressure in the iliac fossa caused no discomfort. There was no aneurismal pulsation or bruit, and moderate manipulation gave but little pain, but rough handling caused a good deal of suffering. The foot and leg were œdematous, the œdema disappearing only partially after a night's rest in bed. The secretions were normal. Appetite good; bowels regular; urine slightly acid, with specific gravity 1020.

The case having been considered to be either a cyst or a chronic abscess, becoming daily more inflamed, the patient was kept in bed for a few days. On Sept. 2nd a small exploratory puncture was made, when pus only flowed—at first pretty freely, but it soon suddenly ceased. The wound was therefore enlarged, when four pints of purulent fluid loaded with hydatid cysts were evacuated. A poultice was applied, and the patient went on remarkably well for four days, when he became very feverish, his temperature reaching 104·4°.

Sept. 7th.—The discharge, which had been profuse, now almost ceased. The edges of the wound were exceedingly painful, red, and dry. He had an anxious expression of countenance; pulse 112, and very strong; temperature 103°; bowels constipated. Ordered half an ounce of castor oil.

9th.—Marked improvement generally. Pulse 98; temperature 102°; urine loaded with lithates. Ordered bark and ammonia. Profuse discharge, with numerous hydatids, from the wound.

On Sept. 10th he was slightly delirious; and on the 13th he became semi-comatose, refused food, passed his urine and fæces unconsciously, and, getting gradually weaker, died on the 16th.

The following is the report of the post-mortem examination made by Dr. Turner, the resident assistant-physician:—Body well nourished; robust frame; much subcutaneous fat, rather yellow. There was a circular wound, about the centre of Scarpa's triangle, on the left side, leading to a cavity running upwards as far as the crural ring, and downwards for about four inches in the course of the muscles, amongst which it burrowed. No œdema of the leg; skin natural. The lungs were congested posteriorly and œdematous; the heart walls were flabby; liver soft and somewhat fatty; spleen soft and dark; kidneys pale.

Remarks.—In commenting on this case Mr. Mason observed that it was so full of interest clinically that before treatment the man was sent to the College of Surgeons during one of the pass examinations. Mr. Mason dwelt especially on the diagnosis of swellings in the femoral region, omitting for the present those met with in the inguinal region. He said that from the proximity of the parts the diseases in this neighbourhood were sometimes grouped together as tumours or swellings in "the groin." He thought it was better, both anatomically and surgically, to describe each region with its diseases separately.

In the case under notice, as there was evident fluctuation, it was clear that the swelling contained fluid of some kind, but there was nothing to indicate the presence of the hydatids until the puncture was made. The man had no tenderness on the spine; he could raise and turn himself in bed without difficulty. There was no impulse on coughing, and no diminution in the swelling when he assumed the recumbent posture. He could also readily extend the thigh on the trunk. These points were a fair proof that the patient was not suffering from psoas abscess, or a reducible femoral hernia. The age of the patient, too, was rather against his having a psoas abscess, such an abscess being more common in children. It might possibly be an iliac abscess, which by opening into the sheath of the psoas might point below instead of, as it usually does, above Poupart's ligament. Mr. Mason directed attention to the difference in the symptoms between a psoas abscess and a femoral hernia, remarking that although there was impulse on coughing in both, and that in both the tumour came suddenly from above downwards, yet that on raising the buttock in psoas abscess the tumour steadily diminished in size, from the fluid running back by gravitation, whereas in femoral hernia, if taxis be employed, the tumour returned quickly and with the characteristic gurgle. Then a femoral hernia was rather unusual in a man, and certainly there were no symptoms of strangulation, such as sickness, constipation, and the dragging colicky pains in the abdomen.

On placing the limb in a particular position there was an arterial thrill, but this thrill was very different from the heaving eccentric pulsation observed in aneurism. Moreover, on making pressure on the external iliac artery the sac could not be in the least emptied as in aneurism. It was clearly not an aneurism.

Again, if it were a solid growth, such as a glandular tumour or simple enlarged lymphatic glands, it would probably be more movable; and if it were a tumour of a malignant character it would be soft and elastic to the touch, rather than distinctly fluctuating, and numerous veins might perhaps be observed ramifying over the skin. Further, if it were a fatty tumour or a piece of omentum, it would have a soft, doughy, irregular feel.

The patient was particularly questioned and examined

with reference to his having an inflamed corn or sore of any kind on the foot or on the leg, but there was a total absence of evidence on these points. It was not a simple, acute abscess, for there was no particular pain nor redness, thinning, and desquamation of the skin. Then he could bear his weight on the leg of the affected side, indicating that the hip and sacro-iliac joints were free from disease. The œdema of the leg was doubtless due to pressure on the femoral vein. The superficial veins of the limb were normal. Mr. Mason remarked that in some cases the internal saphenous vein becomes varicose in the femoral region, and this condition might be mistaken for other diseases; thus, like a hernia or a psoas abscess, the tumour returned when the patient lies down. The diagnosis was, however, generally easy by noticing that the veins in the lower part of the leg were, as a rule, relatively enlarged; and, further, that if the patient be in the upright posture, by pressing on a hernia it was kept *in situ*, whereas, in a varicose saphenous vein, the vein below the point of pressure becomes distended, owing to the obstruction of the circulation. The sudden enlargement was in all probability the result of the cyst rupturing the deep fascia, and so coming more to the surface. There was no reason for suspecting abscess in connexion with necrosis or caries of the pelvic bones, nor with any of the abdominal or thoracic viscera, for there was no pain in these regions, nor in any other part of the body.

Arguing by exclusion, therefore, the examination and the symptoms tended to prove that the case was one of either a cyst or a chronic abscess.

In referring to the cause of death, Mr. Mason spoke of the difference, pathologically, between pyæmia and septicæmia. As there were no purulent deposits found after death, the patient died of septicæmia. It was highly probable that had the cyst not been opened it would have burst very shortly, and the patient would almost to a certainty have succumbed from the absorption into the system of the products of the local inflammatory process.

NORTHAMPTON GENERAL INFIRMARY.

LARGE CYSTIC ADENOMA OF BREAST.

(Under the care of Mr. MASH.)

THE following notes were taken by Mr. G. F. Kirby Smith, house-surgeon:—

Sarah U——, a married woman, aged forty-seven, was admitted on Jan. 10th, suffering from a large tumour of the right breast. The patient stated that she had always enjoyed good health, and she gave no family history of malignant disease. About a year ago she first noticed that the right breast began to get larger than the left. This was about twelve months after her marriage. The breast steadily enlarged up to last August, when its increase in size became more rapid, and this rapidity of increase continued until the date of admission. She said that she had been remarkably free from pain in the breast up to the last two months, since which period she had experienced an aching pain from the weight of the mass. She had never been pregnant, and the catamenia were regular.

On admission the patient was a well-nourished, fairly healthy-looking woman, with no trace of cachexia. A large tumour, the size of the head of an adult, occupied the right breast. The mass was freely movable on the surface of the chest, and its outline was even. Large and tortuous veins wandered under the skin. To the touch it was firm in some parts, but softer in others, and was indistinctly lobulated; the firmer portions were finely nodular; there was a feeling of indistinct fluctuation at the base of the tumour. The circumference at its base was twenty inches, and at its centre twenty-two inches and a half; the skin was freely movable over its surface, and the axillary glands were not enlarged; there was no discharge from the nipple, which was not retracted, but merely flattened from expansion.

On Jan. 21st, the patient being under the influence of chloroform, Mr. Mash proceeded to remove the mass by the usual semi-elliptical incisions in the course of the fibres of the pectoralis major. The tumour was connected to the chest by loose areolar tissue, and was easily separated. Taking into consideration the size of the growth, the amount of hæmorrhage was but small, six vessels only being quickly twisted. The edges of the wound were brought together by fifteen wire sutures. A strip of lint, dipped in carbolic oil, was placed over the wound, and a pad of lint above and below. The whole was secured by a bandage round the chest, and the arm was fixed to the side. In the evening she had hardly recovered from the shock of the operation, seemed inclined to sleep, and felt no pain. Pulse 96; respiration 25; temperature 98·2°. To have strong beef-tea and milk.

Jan. 22nd.—Slept a good deal during the night. Scarcely any pain in the situation of the wound. Complains of thirst. Tongue clean, but rather dry. Pulse 120; respiration 30; temperature 99·6°.—Evening: Was sick once after dinner. Has experienced more pain during the day. Face flushed; tongue moist; pulse soft and compressible. To take twenty grains of chloral hydrate. Pulse 126; respiration 28; temperature 101°.

23rd.—Has passed a comfortable night, but was sick after the chloral draught. Slight headache this morning. Wound dressed for the first time with carbolic-acid lotion (1 in 40); it looked remarkably well. Pulse 132; respiration 22; temperature 99·8°. To take half an ounce of castor oil, as the bowels have not acted since the operation; and to have eight ounces of port wine.

24th.—Has taken a chop for dinner. Wound again dressed, and is doing well. Pulse 108; respiration 28; temperature 99·8°.

30th.—Anterior portion of wound has united. Four sutures removed.

Feb. 8th.—Remaining sutures removed to-day. Wound dressed with zinc ointment.

From this date the patient continued to make an uninterrupted recovery, and was discharged cured on March 6th.

On examining the tumour, the atrophied mammary gland was seen to be spread out over its anterior aspect. The proper tissue of the tumour may be roughly divided, for description, into two parts—namely, a superficial portion, which had a solid structure; and a deep part, occupying the base of the growth, of a cystic nature. The solid tissue, on section, was of a pale, yellowish-white colour, and to the touch was firm and somewhat elastic. A few small cysts were scattered here and there through its substance. On placing a section under the microscope glandular follicles were seen separated by fibrous tissue with some spindle-cells. The deep part of the growth, or that resting on the surface of the chest, was made up of a large number of cysts, varying in size from a walnut to a small pea. One cyst, in the centre of these, was larger than the rest, having the dimension of an ordinary orange. With this larger cavity many of the surrounding cysts communicated. The fluid contained in these cysts varied in colour, in some being pale-yellow and serous, whilst in others the colour was brownish-red, evidently from mixture with the colouring matter of the blood. The weight of the tumour was 8 lb.

Medical Societies.

CLINICAL SOCIETY OF LONDON.

THE last ordinary meeting of this Society for the session was held on May 28th, Sir W. Jenner, Bart., President, in the chair. Mr. Barwell brought forward the results of his operative interference in the case of hypertrophy of the face, and Dr. Dickinson gave a brief account of the researches of the Committee appointed to investigate the curious case of this affection exhibited by Dr. Lee. A general repudiation of the superiority of the employment of the elastic ligature over the knife followed Mr. Maunder's case of fistula treated by both methods. Mr. Hulke related an interesting case of arterio-venous aneurism; and the sitting concluded with an account of acute pemphigus by Dr. Southey.

Mr. BARWELL exhibited his patient with Hypertrophy of the Lower Part of the Face (see p. 407), in whom he had ligatured both facial arteries as proposed, the vessels being tied in two places and divided between the ligatures. Erysipelas of

the scalp followed the operation, and the patient had just returned from a month's sojourn in the country. The operation had effected very slight improvement, the lips, however, appearing somewhat thinner and harder than before. Mr. Barwell added that, in consequence of the doubt expressed as to the lad's statement that the swelling had come on in one night, he had communicated with the parents, who maintain that the lips increased suddenly in one night from their natural size.—In reply to Mr. HULKE, Mr. BARWELL stated that both facial arteries were tied simultaneously.—Sir W. JENNER thought there was a slight diminution in the size of the lips, but that there was distinct pulsation on the right side, showing that the hypertrophied tissues still received a considerable supply of blood.—Mr. BARWELL said that the lips had increased slightly since the patient left the hospital. Within a week of the operation a slight throb was felt on the right side. The facial was certainly tied, and no second facial artery existed, but it was impossible to deal with the collateral supply. He thought that the only further treatment that could be adopted was to excise some of the mucous membrane, but the patient was averse to further measures.

Mr. MAUNDER read notes of a case of Double Fistula in Ano, one treated by the knife, the other by elastic ligature. He had brought forward this case as a test of the value of the elastic ligature as compared with the knife, the use of the ligature having been revived by Mr. Allingham for the treatment of fistula. The patient was a female twenty-four years of age, in whom a fistula formed in the right side of the anus from abscess in the buttock; and twelve months later a similar one appeared on the left side. The two sinuses were almost exactly alike, both as regards position and direction, and therefore all the more favourable for the comparative trial. The right was laid open with the knife, and dressed with oiled lint, the left was treated with the elastic ligature, and the progress of each accurately observed. There was much pain in the ligatured side, but hardly any on the right, the knife-wound rapidly healing. The ligature came away nine days after the operation, the elastic loop cutting through the roof of the sinus and being converted into a rounded body the size of a pea. The wound left by the ligature had callous prominent edges, and did not cicatrise until five weeks after that produced by the knife, although in the latter the lint had been retained forty-eight hours longer than usual. The case then was strongly in favour of the knife, as being less painful, more rapid, and accompanied by less risk to health. The ligature should only be reserved for those patients who object to a cutting operation, and to those who are the subjects of hæmorrhagic diathesis.—Mr. HEATH thought there were cases of fistula seated high up where, to obviate hæmorrhage, it would be more prudent to use the elastic ligature, or a similar method—e.g., Mr. Luke's. The knife, however, was applicable in the vast majority of cases. He would never employ the elastic ligature for the removal of tumours. The experience of the first case in which the treatment had been carried out in this country (that of Sir H. Thompson's) being by no means encouraging.—Mr. HUTCHINSON understood Mr. Maunder to admit that there were exceptional cases where the ligature was of value, and that its inferiority was shown in cases where it competed with the knife. He had seen but little of the use of the elastic ligature, but could confirm Mr. Maunder's statement as to the slowness of healing that followed its use.—Mr. HULKE had not used the ligature himself, but had seen it employed in three cases, and the extreme painfulness and slow progress made in each case had convinced him of the inferiority of the method.—Mr. THOMAS SMITH said that he had tried the elastic ligature on two occasions, the result being that he would never resort to it again, unless prevented for very good reasons from using the knife.

Mr. HULKE read notes of a case of Arterio-venous Aneurism of the Femoral Vessels, caused by a pistol-shot. He stated that the symptomatology of arterio-venous aneurism had been fully described more than a century ago by Dr. W. Hunter at the Society for Medical Observation and Inquiry, and the chief additions to his work had been made by Nélaton, who first drew attention to the characteristic continuous, rhythmically swelling murmur present in these cases. This sign is, however, absent in many cases where the existence of an arterio-venous aneurism is undoubted. In the present case much relief was obtained by the uniform support of the whole limb by an elastic stocking after the failure of pressure on the cardiac side, the latter method only being successful in recent cases. The patient was a coachbuilder, forty-four years of age, who was admitted into the Middlesex Hospital on July 15th, 1874, complaining of weakness and pain in the right lower limb, disabling him from work; the limb was swollen, cutaneous veins dilated, and the leg eczematous. Three years before a pistol had exploded as he was putting it into his pocket; the ball entered below the right hip, and lodged in the limb, beneath the skin of the inner side of the thigh. When it was extracted its spherical shape was unaltered. The loss of blood was very slight, and the patient went out the day after the accident, resuming work a month later. Two nights after the accident there was pain in the thigh, and a throbbing sensation which has continued ever since, the limb becoming weak and painful. When seen by Mr. Hulke there was a small scar five inches vertically below the crista ilii, on a level with the upper border of the great trochanter, and a smaller linear scar on the inner side of the thigh, seven inches and a half below the pubic spine. A line joining these two scars crossed the limb obliquely over the line of the femoral vessels where the vein usually passes beneath the artery. From this spot upwards both artery and vein were much dilated, the latter most so under the sartorius muscle, where it formed a sinuous bulging, simulating an aneurismal pouch. There was pulsation of the vein through its whole course, synchronous with the arterial pulsation, and a loud, rough, continuous bruit, rhythmically swelling with the pulse in the artery, was heard over its whole course, and a strong purring vibration was felt. The signs were observed from the ham to the groin, as far as the external iliac vessels were accessible; below the level of the inner scar they diminished in intensity; enlargement of cutaneous veins, and diminution in pulse of both tibial vessels. Compression upon the artery alone against the horizontal ramus of the pubes was followed by a diminution of both artery and vein below, and cessation of pulsation, murmur, and thrill. Mr. Hulke concluded from these signs that there was a direct communication between the artery and vein (an arterio-venous varix), probably produced by the bullet passing between the vessels and injuring their outer coats, which subsequently gave way. A case he saw several years ago of bullet-wound in the thigh leading to rapidly fatal blood-poisoning from inflammation of the knee-joint, showed after death that the ball had passed between the femoral vessels, its track being marked by an ashy-grey slough in their walls, the surrounding tissues being consolidated. As to the treatment pursued in the present case, Mr. Hulke stated that ligature of the femoral artery above and below the wound was left as a last resource, on account of the great risk attending it. Pressure was made in the groin for several weeks by a Carte's compressor, alternating with a Skey's tourniquet a few inches below. For several days this was aided by direct pressure at the seat of inosculation, and pressure immediately above and below this point was also tried. None of these measures answered, and the patient was sent away for a month with instructions to bandage the leg methodically. He did not return until three months had elapsed, when the leg was more swollen and painful, the state of the bloodvessels being unaltered. Again direct pressure was tried, with methodical bandaging of the whole limb; and on his discharge an elastic stocking was supplied him, reaching from the foot to the groin, a small pad being placed upon the spot of inosculation. This has enabled him to resume his employment. The circulation in the leg and the nutrition of its tissues are improved, but the condition of the aneurism is unaltered. The relief obtained is so great as to render any operative interference unjustifiable. Sphygmographic tracings were shown; they contrasted with the tracings from a case of aneurism of the femoral artery in exhibiting the tremor on the diastolic curve.—Mr. HEATH was not surprised to hear that pressure was ineffectual, and he related a similar case in which a communication was formed between the anterior tibial artery and one of its companion veins

from a blow on the leg. Pressure failed to produce any alleviation, and this he had found to be the experience of most writers on the subject. There was slight swelling and throbbing. An elastic stocking was ordered, and he believed the patient has continued well.—In answer to Sir W. JENNER, Mr. HULKE stated that the colour of the limb was unchanged, save from the slightly bluish tint due to general venous dilatation. The interesting point in these cases was the fact of the dilatation of the artery in both directions, which could not be explained so readily as the dilatation of the vein. Roux published several cases of arterio-venous aneurism following venesection, in some of which there was a long interval between the infliction of the wound and the formation of the aneurism; in one, six years elapsed. In all these cases there was arterial dilatation in its whole length. It might be explained by the reflux into the artery from the meeting of the two blood-currents.—Dr. DOUGLAS POWELL suggested that the arterial dilatation was due to the inflammatory mischief in the neighbourhood of the vessel; but Mr. HULKE pointed out that the dilatation was not limited to the locality of the aneurism, but affected the whole length of the vessel.—Mr. PICK related a case in which the communication between artery and vein appeared to be congenital. It occurred in a young girl, fourteen years of age, in whom one lower extremity was greatly enlarged, there being enormous dilatation of all its veins, especially of the femoral, which gave the jarring pulsation and bruit. The difference in the size of the two limbs was noticed shortly after birth. In this case some of the superficial veins were large almost to bursting; and the treatment consisted in their obliteration by needles being passed under them, and the patient wearing an elastic stocking.

Dr. DICKINSON then made a short statement on the Report of the Committee (consisting of Dr. Tilbury FOX, Dr. Dyce Duckworth, and himself) upon the remarkable case of skin-affection brought forward early in the session by Dr. R. J. Lee (*vide* THE LANCET, vol. ii. 1874, p. 803). The affection consisted in an eruption which travelled slowly round the body in a spiral manner, in the form of a band, the tail part of which disappeared as the head advanced. Examination of scrapings from the surface had yielded no result, so that chloroform was administered to the child, and a small portion of skin excised. The microscopical examination of this was not fully completed.—Dr. BUZZARD asked if the "treatment" stopped the progress of the disease? to which Dr. Dickinson replied in the affirmative.—Dr. SOUTHEY inquired if the Committee had arrived at any conclusions?—was the affection due to a parasite, or was it (as had been suggested) fictitious?—Dr. DICKINSON said that the disease was perfectly genuine was certain, not only from the youth of the patient, but also because it had been under close observation, and from the complete arrest of the disease by the excision of a small piece of skin. (The excised portion was from the advancing end of the streak.) This result showed that the essential material of the disease was removed by the operation, and he had reason to believe that this was parasitic.

Dr. SOUTHEY read notes of a case of Acute Pemphigus. The patient was a somewhat hysterical general servant, nineteen years of age, who had been exposed to some privations before her admission into St. Bartholomew's Hospital on November 19th, 1874. Previously her health had been good. Less than one month before a small bleb formed on the side of the right hand. Three days before admission she was feverish, complained of sore-throat and general pains, and an eruption of small rounded red spots of variable size appeared all over the body. When admitted many of these were distinct bullæ, the temperature was 102°, and the eruption was thought to be syphilitic by the house-physician, who ordered iodide of potassium. The next day, after she had had a warm bath, the bullar eruption became more copious. The bullæ were of all sizes, and each surrounded by a halo of redness; several occurred on the cheeks, angles of mouth, lips, and chin, on the dorsal and palmar surfaces of the hands and between the fingers, on the arms and legs, chiefly at the flexures of the joints, also largely on the back of the trunk, abdomen, and thighs. Some of the blebs measured as much as one inch across, their contents were clear or opaque, alkaline, and albuminous. The tongue was aphthous, throat sore, deglutition painful. There was no collateral evidence of syphilis, which was set aside as a probable cause. The pulse was 117, and temperature 101·7°; bowels were relaxed; urine, of specific gravity 1038, contained a large excess of earthy phosphates. Salines were given, and fluid nutriment. The whole surface of the body was swathed in cotton-wool soaked in carbolised oil, one or two of the blebs being injected with nitrate of silver. Sleep was procured by morphia. The patient complained much of cold. Fresh bullæ appeared daily, becoming converted in the points of pressure into superficial sanious sores. At length, when she was in a very prostrate condition, she was lifted into a warm bath (at 100°) and kept in it for twelve hours. This was attended with the greatest benefit; she slept in the bath, took more food, and gained strength. The bath was repeated on the three following days with marked benefit, when a relapse occurred on December 3rd, with great prostration and delirium. The urine at this time was high-coloured, of specific gravity 1045, and, treated with nitric acid, became of a black colour, with evolution of nitric oxide and oxygen, due to the presence of indican or some allied pigment. The quantity of indican varied with the degree of prostration. The carbolic dressing was changed for carron oil, in the belief that the nervous prostration might be due to the former. She thence rapidly improved, the quantity of colouring matter in the urine subsiding, and in a few weeks she left the hospital, bearing numerous scars on the body. There has been no relapse. Dr. Southey remarked that acute pemphigus was so rare in the adult that Hebra disbelieved in its existence save when it was produced artificially for fraudulent purposes. The eruption in this case was universal; it was preceded by a sore on the hand three weeks before. It could not be a form of "hydroa" similar to those described at the last meeting of the Society (see p. 725) by Mr. Hutchinson, since she only had one dose of iodide of potassium given her. He believed that she would have died had the hot bath not been resorted to. If this was a case of acute or chronic pemphigus it ought to recur sooner or later, according to Hebra's dictum.—Mr. HULKE asked whether the colouration of the urine was not due to the same cause as the extreme nervous prostration—namely, carbolic acid.—Dr. SOUTHEY said that the urine did not contain carbolic acid. Further, in all cases in which it is passed in the urine the characteristic smell of the acid is retained. The characters of the colouring matter in this case were quite in accordance with those of indican, which is increased under conditions of great prostration.—Dr. GREENHOW pointed out that the colouration of the urine due to carbolic acid appeared spontaneously, whereas indican required the addition of the strong acids to reveal its presence. He had met with indican in the urine in cases of progressive muscular atrophy and spinal paralysis, and it was said to occur in cholera.—Mr. HUTCHINSON asked if the quantity of the fluid in a bulla had been estimated; the bullæ seemed to have been larger than in the hydroa of iodide of potassium. He had never seen a case of the latter eruption that could be mistaken for pemphigus, the bullæ of which were large, containing one or two drachms of serum; while the hydroic bullæ were surrounded by an inflammatory areola, and were depressed in the centre. In this case, too, the iodide was suspended the day after it was prescribed. Most of the cases of acute pemphigus he had seen were cases to which the term "acute" might well be applied, from the rapid appearance of a severe eruption, and were all examples of ordinary relapsing pemphigus. He related an interesting case of this acute form occurring in a young man twenty-six years of age, who, though somewhat delicate, had never been seriously out of health. The eruption began with a crop of herpetic vesicles on the eyebrows, surrounded by much erythema; the vesicles rapidly becoming confluent, and the rash spreading over the trunk. There was much attendant erythema around the base of the blebs, which was unusual. The bullæ increased in size, some were as large as half-eggs, and hardly any healthy skin remained. Ulcers formed on the buttocks, and the patient emaciated much, and was in a state of extreme prostration, in spite of all kinds of tonic treatment. At length, being persuaded that the disease could be nothing else than pemphigus, Mr. Hutchinson prescribed arsenic (four or five minims of the liquor), a change in treatment which was immediately followed by improvement. On one occasion the remedy was omitted experimentally, and a few fresh bullæ occurred.

Its use was therefore resumed, and the patient left hospital quite well. He has since had a slight relapse. He had seen two or three fatal cases of pemphigus, one with whom the arsenic treatment disagreed, and he regrets it was not pushed in spite of this—so firmly does he believe in the truly specific effect of arsenic in this disease. Two other cases occurred in the practice of Dr. Burrows, when Mr. Hutchinson was a student at St. Bartholomew's Hospital.—Sir W. JENNER inquired if Mr. Hutchinson thought the action of arsenic could be so rapid as to effect an improvement in so short a time.—Mr. HUTCHINSON believed that arsenic caused improvement in pemphigus within twenty-four hours of being taken. The remarkable feature in Dr. Southey's case was that it got well without any such treatment. He did not believe that the hot bath was the reason of its cure, and he had never seen pemphigus improve spontaneously.—Sir W. JENNER mentioned a case of chronic pemphigus which he had seen at the Hospital for Sick Children, in which an attack of measles cured the pemphigus.—Dr. SOUTHEY, in reply, stated that some of the bullæ contained as much as a drachm of fluid. Their average size was that of a shilling. Only in the early stage did they possess a red areola; nor was there any induration around them, and the resulting ulcers were quite superficial, save on the buttocks and other prominent parts subjected to pressure. He believed the carbolic acid had a good effect on the disease, and that the case would have proved fatal had it not been for the hot bath, which was discontinued as soon as she improved, on account of the difficulty in maintaining the bath at a constant temperature without continual supervision.

The Society then adjourned till October.

REPORT
OF
The Lancet Sanitary Commission
ON THE
SANITARY CONDITION OF OUR PUBLIC SCHOOLS.

No. I.—INTRODUCTORY.

WITHIN the last thirty years the conditions of schoolboy life have vastly improved; the range of education has been extended, and boys are now able to follow studies suited to the particular bent of their minds; more attention is paid to general culture and moral training than was formerly the case; and an air of elegance and comfort, if not of actual luxury, is apparent in all the domestic arrangements. Whilst viewing with satisfaction the reforms that have been effected in this respect, we regret that more attention has not been paid to sanitary details and hygienic arrangements. The precautions taken to prevent the introduction of infectious diseases into schools are by no means satisfactory or efficient. Medical supervision is only required in case of actual illness. No attempt is made to learn anything about the physical development of the boy at this most important epoch of life, nor the influence his studies and sports have in aiding or retarding this development. Nor is sufficient attention paid to the sanitary condition of the town in which the school is situated. In 1864 the Royal Commission appointed by Her Majesty to inquire into the revenues and management of certain colleges and schools issued their report. This report dealt with questions connected with the administration of the colleges and schools visited, and with the system and course of studies respectively pursued therein, as well as with the methods, subjects, and extent of the instruction given to the students of the said colleges and schools. The report did not extend, however, to any points not strictly educational. This is much to be regretted, for, with the powers furnished to the Commission, much useful information might have been elicited in respect of the sanitary arrangements of the schools in question.

The object of our Commission has been to collect information from our chief public schools on points connected with their sanitary management, to determine what are the influences that chiefly affect the health of the boys, and to draw up a series of recommendations that may serve as a useful guide and standard of comparison to schools of all classes in matters of scholastic hygiene. For this purpose we have visited Eton, Harrow, Winchester, Rugby, Marlborough, and other important schools. At these places we have made a thorough inspection of the school premises, the boarding-houses, and playgrounds; inquired into the sanitary condition of the towns in or near which they are situated; acquainted ourselves with the regulations that are in force to prevent the chance introduction of infectious diseases into the school, and with the nature of the supervision exercised over the boys with respect to the influence of their work and play on their health during their stay at school; and we endeavoured to obtain from the various masters an expression of opinion respecting the best arrangement of studies and dormitories with regard to moral and sanitary requirements. We desire here to acknowledge the courtesy extended to us by the authorities on the occasion of our visits to the respective schools, and for the aid afforded in furnishing us with full and minute particulars on all points connected with this inquiry.

Before we proceed to describe the condition of individual schools, we must make a few introductory remarks, and state the views we have arrived at with respect to the sanitary management of schools generally. This part of the subject will embrace the following particulars:—

1. The relation of the school to the town, the drainage, water-supply, and the constitution of the sanitary authority.
2. The means adopted to prevent the introduction of zymotic diseases.
3. The means employed to prevent the spread of epidemics and to secure the isolation of cases.
4. The general sanitary arrangement of studies, dormitories, lavatories, closets, urinals, &c.
5. The supervision, medical or otherwise, exercised over the boys, with respect to their capacity for mental or physical exertion.

The relation of the school to the town.—Diseases originating in the town can be introduced into the school in three ways: (1) By emanations from the sewers and cesspools, (2) by the supply of specifically contaminated water, and (3) by direct intercourse with the townspeople. It is, therefore, important that a school be isolated as much as possible from the town in or near which it is situated. Such, no doubt, was the condition obtained for our older public schools at the time of their foundation. Eton was separated from the town of Windsor by the river Thames, the growth of the township of Eton being of a date subsequent to the foundation of the College. At Winchester, the Cathedral and Close intervened between the College and the town; Harrow and Rugby were mere hamlets at the time the schools were founded. Now, however, most schools are more or less surrounded with houses, and considerable towns have begun to form round them. In the majority of cases the schools are connected with the town sewers, and use the water supplied to the inhabitants generally. Recent sad occurrences, both at Oxford and Cambridge, have shown how readily infectious material may be introduced into the college buildings from without by either of these channels. The policy schools ought to pursue is to render themselves as independent as possible of the town; either, as Winchester is beginning to do, adopt the system of earth-closets; or, like Marlborough, secure a system of drainage distinct from the town. Where neither of these plans can be carried out, the authorities ought to see that the town sewers near the school buildings and boarding houses are sufficiently ventilated, and efficient traps interposed at the junction of drains. Dr. Dukes, the medical

officer at Rugby, has recently drawn our attention to a trap and ventilator combined, admirably adapted for this purpose, which we have already fully described in our columns. With regard to the water-supply, the possibility of obtaining a separate supply is oftentimes extremely difficult. Very few schools situated in towns could obtain, as Marlborough has done, an excellent and sufficiently abundant supply on their own premises, but where the town water is used the school authorities ought to see that efficient filtration is adopted before distribution. The rules respecting the intercourse of boys with the town varies at different schools. At Eton and Harrow there are no restrictions. At Winchester the boys are not allowed to go into the town without leave; at Marlborough the town, with certain exceptions, is out of bounds. We think a reasonable amount of liberty may fairly be extended to the boys in allowing them, at certain hours, to visit the town. But it should be distinctly understood that in case of any epidemic arising the privilege would be withdrawn, and the boys expected to confine themselves to the school grounds. Dr. Butler, head master of Harrow, says he has experienced no difficulty in this respect—that the boys, if aware that fever is present in any part of the town, naturally avoid going in that direction. We have been struck with the little influence the school authorities seem to have over the sanitary arrangements of the town in which their schools are situated. In most cases the prosperity of the town depends entirely on that of the school, yet the school authorities are very poorly represented on the sanitary boards. Eton, Rugby, and Winchester are each represented by one master only. Harrow had no representative for some years, till this year, when Dr. Butler came forward, and obtained the post of chairman to the board. We think it would be greatly to the advantage of the schools if the masters came forward more readily to take part in the sanitary administration of the town. Neither at Eton, Harrow, Winchester, or Rugby are the sanitary conditions of the towns quite satisfactory, and the presence of educated and liberal-minded gentlemen on the sanitary boards of these places would soon bring about the necessary reforms.

The means adopted to prevent the introduction of infectious diseases.—The precautions adopted in the majority of schools to prevent the introduction of infectious diseases into the school are perfectly inadequate. As a rule, no certificate is required from boys returning from the holidays, at any of the large public schools, stating that the boy has not been ill, or, if ill, stating the nature of the illness, whether infectious or not, and declaring if any infectious disease has been prevalent in the neighbourhood of the boys' residence. The masters state that the parents are expected to give full information on these points, and that they usually do so, though in some cases they have failed. We feel very strongly on this point, and urge that the furnishing of this certificate be made compulsory on the parents, and that some legal responsibility ought to be attached to them if they negligently or wilfully make misleading returns on these points. Again, we think the usual school medical attendant should examine all boys on their return from home. It is objected by some masters that it would not be easy to do so in time to prevent boys meeting first. But this difficulty might be overcome if the boys came back in successive days, the senior forms returning earliest. The following instances, which have come under our observation, show the importance of this kind of control. A short time ago a boy was sent back to school: during the holidays he had been ailing, but not seriously ill. The family medical man regarded the case as slight, and thought that the change back to school would benefit him. Fortunately, on arriving, he was seen by the school doctor, when it was found that he was suffering from typhoid fever; the boy was isolated from the others, and no further mischief occurred. Outbreaks of scarlet fever have frequently been traced back to individuals who have entered a school or family whilst still suffering from the disease. About two years ago a very interesting case came under our observation. A medical man engaged a page-boy; shortly after his arrival the mistress of the house was attacked with scarlet fever. The cause at first was not suspected, but a few days later the page showed signs of dropsy, and on examination was found to be "peeling" nicely. On inquiry it was found that previous to his arrival at the house he had complained of slight sore-throat. Had this boy been examined by his master on his arrival, there is little doubt the disease would have been detected, and he would not have been admitted to the house. We would also recommend an examination of the boys before their return home. If a record were kept of the condition of a boy's health and physical development during the time he was at a school, the information might frequently prove useful at a later period. Moreover, the records would furnish valuable material for statistics concerning the vital conditions at this epoch of life. Dr. Fergus, the medical officer of Marlborough School, has for some years kept such records, and the useful information he has been able to collect on many points connected with school life has impressed us with the importance of having this branch of inquiry followed out at all our large educational establishments. We shall return to this subject when considering the medical supervision exercised over boys with respect to their capacity for mental or physical exertion.

Means employed to prevent the spread of epidemics and to secure the isolation of cases.—Nothing can be more admirable than the means generally employed to prevent the spread of infectious diseases and secure the isolation of cases in the schools we have visited. Each possesses an excellent sanatorium devoted entirely, with the exception of Rugby, to the reception of infectious cases. These sanatoria are removed a considerable distance from the school buildings, experienced matrons have charge of them, and the arrangements for disinfecting clothes, bedding, &c., are admirable. At Rugby the arrangements are similar to those of the other public schools, only ordinary cases of sickness are admitted as well as infectious. This would be a mistake were it not for the peculiar construction of the building. At the time the sanatorium was built the Rev. C. T. Arnold, the second master, who has always taken great interest in the sanitary arrangements of the school, consulted the late Dr. Bright on the subject, and he proposed that the sick house should be built in compartments, each compartment being in fact a separate hospital. One of these compartments is devoted to infectious cases, and we think the isolation of these cases is sufficiently secured. We recommend, however, as a general principle, that the sanatorium should be kept entirely for infectious cases. There is one other point we would suggest, which is, that in the event of scarlet fever breaking out in any one house, the pupils of that house be isolated, and not allowed to mix with the other boys in the general schoolroom or in the playground for at least fourteen days after the occurrence of the last case. Dr. Butler told us that one great difficulty they experienced at Harrow was the removal of the boys when fairly convalescent. They were naturally anxious to send them home when they could be removed with safety to themselves, but their departure was often delayed because scruples were felt about allowing them to travel in public conveyances. This is a difficulty which is pretty generally felt; it is certainly not pleasant to travel with our family to some watering-place in company with a patient convalescing from scarlet fever or small-pox, however remote the chance of infection may be. Government ought to interfere decidedly in this respect, and compel our railway companies to provide carriages or compartments for patients convalescing from infectious diseases. Now that the intercommunication between the different systems of railroads is so complete it could be easily arranged, in the majority of cases, that these carriages might go straight through to their destination without change.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—Professor Turner, of Edinburgh, will be put in nomination for re-election to the office of Lecturer on Anatomy and Physiology, as he finds that he cannot complete in three lectures about to be delivered by him at the College the subject he has selected—viz., "On the Comparative Anatomy of the Placenta." It is stated that upwards of 300 candidates have entered their names for the preliminary general examination for the diplomas of Member and Fellow of the College. The examination, which commences on Tuesday next, will be held at the University of London, Burlington-gardens, W. Of the 24 candidates admitted to the final examination for the Fellowship of the College, held last week, eleven were unsuccessful.

THE LANCET.

LONDON: SATURDAY, JUNE 5, 1875.

As a popular hypnotic opium for a long time had no rival. The action of bromide of potassium was not sufficiently sedative to bring it into the lists against the older drug; but the introduction of chloral placed at the disposal, not only of the physician, but of the public, an agent capable of inducing sleep almost as surely as opium, and in a far more agreeable manner. If its power of relieving actual pain was less, its after-consequences were also far less unpleasant. The quick action and supposed safety of the new drug in a short time made it popular. Its properties and uses rapidly became known, and a prescription for it soon ceased to be necessary. Syrup of chloral took its place in the family medicine chest, and beside the fragrant waters of the dressing-table. Guarded from misuse by no barrier of immediate pain, it was but too ready an escape from the restlessness of our high-pressure life; and among those who feel most keenly the excitement of work or pleasure, the occasional soon became the habitual dose, and the extent to which at the present time chloral is employed without medical direction is probably greater than has ever been the case with any other sedative. By many of those who rely upon it for their rest, and especially by many of its fairer devotees, chloral is regarded as absolutely safe, and the opinion is shared by not a few of our own profession. Unhappily, however, the drug is far from being without its dangers. In more than one instance death has followed the administration of a very moderate dose; and in this a resemblance will be seen to the effects of chloroform, with which chloral has so many chemical and some physiological relations. It is true that in some of the cases the fatal result cannot justly be ascribed to the immediate effect of the sedative. As in the case of opium, its narcotic influence occasionally permits death to take place from some disease which, had it not been for the sedative influence on processes needful for life, would not have had an immediately fatal issue. There have been instances, however, in which death has followed a dose of chloral where no such morbid state existed; and such cases are, probably, more numerous than in the case of any other sedative, with the exception of its congener chloroform. Even when due allowance is made for the publicity which is naturally given to such effects in the case of a newly introduced remedy, their occurrence merits very careful consideration.

But such disasters are not amongst the gravest consequences of the use of chloral. They are too rare to have material weight. The effects of its habitual employment demand much more urgently the serious attention of the profession. The lesson is an old one—that no sedative can be habitually taken with impunity. Chloral certainly is no exception to the rule. Its consequences are not uniform, are not invariable. They are insidious in their development, slow in their progress. Time has been required to estimate their degree and danger; so that it is only now that the profession, and, through it, the public, are becoming aware of their nature. Of their reality there can be no question. Our own columns have contained abundant evidence of the fact. The use of chloral has its pains no less than that of opium; and some day, when the punishment for its misuse has fallen upon some sensitive temperament and gifted intellect, we shall have the "Confessions of a Chloral-Drinker" to take its place beside another well-known volume.

We may trace an analogy between the immediate effects of chloral and the consequences of its habitual employment. In sleep the sensory recipient and lower motor centres are separated from those of consciousness and will, with which during the waking state they are in such close connexion. This separation can only take place under certain conditions, which vary much in different individuals. Chloral introduces an artificial influence, and separates forcibly those functions of the nervous system which would otherwise have been linked together. It stills unpleasant emotion—removes disagreeable sensation—paralyses the will. This can hardly occur repeatedly without some permanent effect. Each region of its influence presents an example of perverted action. The will becomes weakened; emotional manifestations are in the chloral-drinker more easily produced; the evidence of the senses is perverted, and their action is no longer under the same control of associated impressions. All influences of a depressing character are felt more keenly. The sufferer becomes "nervous," emotional, hysterical. Neuralgia and other sensory disturbances become frequent, and with them various paretic phenomena depending chiefly on defective will. Ultimately still graver consequences may result. Delirium, imbecility, and paralysis of the pharynx and œsophagus, are among the symptoms which have occurred in recorded cases, and which have ceased when the habitual dose was discontinued. All the time the supposed need for the sedative increases, the craving for it may become as intense, as intolerable as in the case of opium—the patient moaning for the chloral, which he can hardly swallow; and sleep gradually becomes almost impossible, except under artificial influence.

If these effects in their severer forms are rare, they are not the less real, and are not uncommon in their slighter manifestations. It is time that the public realised that, as we have said, no sedative, chloral or any other, can be taken habitually with impunity. In many cases, and for a long time, no evil results ensue, but the insidious character of the bad effects of its use sooner or later becomes apparent. The utmost care therefore should be taken to prevent the occasional from becoming the habitual dose. Every natural influence which may promote sleep should be attended to. Fortunately, substitutes can be found more readily for chloral than for opium. The employment of the drug is confined, for the most part, to cases in which there is not actual pain, and the restlessness for which it is especially employed may be combated better without drugs than can the actual suffering for which opium and morphia are the chief alleviating agents. The difficulty which has to be overcome lies in the circumstance that to get rid of the cause of the sleeplessness—be it overwork in business, or pleasure, or what-

ever cause—is often a greater trouble, and apparently to the patient a much greater evil, than the simple drug which has so immediate an effect. But the future as well as the present must be kept in view, and the strengthening influence of habit secured on the side of health, instead of on that of disease.

THE public having been of late years occasionally startled by the occurrence of untoward events in the London police-cells, and within the last few weeks it having more than once happened that cases which should have been sent to or retained in hospitals have remained in the cells, or have even died in them, we have thought it a fitting time to make a systematic inquiry into the state of these temporary prisons, and to lay before our readers some exact details as to the quantity and quality of the accommodation provided for the prisoners.

Our suggestion has been received in the most courteous manner by the Chief Commissioner of Police; and, acting under his orders, the inspectors at the various police stations have accorded to our Commissioners every facility in making the inquiry, and have freely given them access to all sources of information. We are glad to be able at once to state that the result of our inquiries has been in every way satisfactory; and from what we saw we have no hesitation in stating that every reasonable provision is made for the safe, the healthy, and the decent keeping of those whose lot it is to become temporary inmates of the cells. It is hardly likely that the generality of our readers possess a clear idea of the purpose which the police cells serve, or of the kind of beings which are their normal occupants, and therefore, before passing to details, we propose making a few general statements.

Our inspection was made between the hours of half-past eleven on Monday night and three o'clock on Tuesday morning, at which time the cells might be expected to present about a normal appearance. Had it been our object to see the cells at the period when they may be supposed to be most full, we should have selected Sunday night, since at that time there is an accumulation of the "charges" of two days; but we considered that the evening of "Saint Monday" would be likely to furnish us with a sufficiently accurate notion.

Each police station is presided over by an "inspector," and no one could fail to be struck by the bearing of these officers and the evident care with which they have been selected for the discharge of the responsible and important duties assigned to them. A case taken to a police station by a constable is first "charged" before the inspector, who decides whether or not the charge is likely to be substantiated, and whether it is of a nature to warrant his detaining the prisoner. If not, the prisoner is discharged on the authority of the inspector alone, who enters in a book the nature of the charge and the reasons for his decision. If, however, the inspector is satisfied with the validity of the accusation, the "prisoner" is removed to the cells to await his examination at the Police Court at its next sitting, unless the inspector should consider the case to be one in which he may reasonably take bail for the prisoner's appearance on the following day. Thus it will be seen that a "police inspector" is a man who possesses no small share of petty power, and is bound to exercise a large amount of discretion in his conduct towards prisoners. If a doubt arises in the mind of the inspector as to the condition of a prisoner's health, he communicates at once with the divisional surgeon, or, in cases of emergency, with the nearest medical man; and it is this gentleman's duty to advise as to the course which is to be pursued. Mere drunkenness is often treated by the surgeon at the police station, and trifling wounds are attended to by him there; but anything of a more serious nature is at once removed to the workhouse infirmary, or to the nearest hospital.

It must be borne in mind that the cases which appear in the newspapers under the heading of "Police" are mostly cases of an exceptional nature, either from the character of the crime committed or the social position of the prisoner. The ordinary current of police events naturally goes unchronicled, the only disadvantage from which is that, the exceptional cases being the only ones reported, the public gets a false impression of the ordinary use to which police-cells are put.

The ordinary inhabitants of the police-cells, then, are the lowest of the low, the filthiest of the scum which society throws up. In our journey to five of the principal stations, we only saw one prisoner who had been entered on the charge-sheet as "gentleman"—a title which was self-assumed, for no one would have recognised in the disheveled, inarticulate drunkard, redolent of spirits, whose dirty-white waistcoat was in strange harmony with his haggard countenance and bleared eyes, any right to be so called. As for the rest, they all evidently belonged to the "sunken sixth," which is to be found in every city; and, with one exception, all the prisoners were charged with drunkenness; and there could be little chance of mistaking their condition, for they were either snoring heavily as a drunkard only snores while he sleeps off the effect of his debauch, or hiccoughing and whining with "the spasms," or clamouring for water, which was at once given them.

These *habitués* of the police cells, as may be readily imagined, are at times most troublesome to deal with, and show often a very devilish ingenuity in their power of annoying the police. It is the custom during the winter to provide prisoners with a great coat or a rug, and these they not unfrequently destroy. They reduce their cells to a condition more filthy than the filthiest pigstye; and one instance was given us of a prisoner filling his hat with the accumulated filth (of his own making) from the floor of his cell, and then, in a fit of impotent rage, discharging it in the face of the constable who came to attend to his wants. Of course it must occasionally happen that a better class of prisoner is brought in contact with these disgusting and miserable beings; but we gathered that every effort is made to classify prisoners—to separate the occasional from the habitual and the sober from the drunken. In case of prisoners being brought in wet, they are given a change of clothing while their things are dried; and a female attendant is attached to every station, whose duty it is to "search" female thieves, or to attend to those of her own sex who are too drunk to look after themselves.

THE Election of County Coroners Amendment Act, which has been prepared and brought forward in the House of Commons by MR. HENRY COLE and MR. EDWARD JENKYNS, has been printed and circulated, and we are enabled to lay before our readers an abstract of the alterations which it is proposed to make. The Bill is a short one, consisting only of seven clauses, and only three of these have reference to the contemplated change in the law. It is proposed that, instead of entrusting the election of coroner to the freeholders of the county, as is now the case, the magistrates only shall exercise this function; and that, upon a vacancy occurring, two justices of the peace shall certify the fact of such vacancy to the Lord Chancellor, who shall thereupon issue his precept to the Clerk of the Peace, directing him to summon the magistrates to a special general session, at the usual place of holding the Quarter Sessions, and then and there proceed to the election of a coroner.

The third clause of the Bill is one of great importance.

"Whereas," it says, "..... provisions are made for granting superannuation allowances to persons who shall have served in any established capacity of the permanent civil service of the State, ... and whereas the office of coroner is a very ancient and important public office connected with the administration of justice, ... be it enacted as follows: In case any coroner, now in office or hereafter to be elected, shall, from age or infirmity, become incapable of executing the duties of his office, it shall be lawful for the justices of the peace of any county, ... upon the request of any coroner, to grant to such coroner an annuity by way of superannuation allowance. Provided always that, in case any such justices ..... and any such coroner shall be unable to agree as to the amount of such allowance, it shall be lawful for Her Majesty's principal Secretary of State for the Home Department, and he is required, on the application of such coroner, to fix and determine the amount of such allowance," &c.

If the Bill becomes law, coroners will be elected by the magistrates, and will be entitled to a superannuation allowance when they become incapacitated for their work. That the mode of election of county coroners requires to be reformed there can be no doubt, for at present the expense incurred by candidates for these offices is so great that the man of capital is far more likely to succeed than the man of brains. It has been observed that the difficulty of getting an office is far greater than the difficulty of filling it when got; and this appears to be true of the office of coroner, for although a man of talent and energy is invaluable in this as in all other offices, it seems tolerably certain that, provided a man has but the sense to keep his tongue moderately quiet, a very mediocre brain can direct or misdirect a jury without attracting public attention. There can be no doubt that an expensive election by freeholders is not a likely method of getting the best man; and we confess that an election by a small body of persons, who are responsible to nobody, is a method which affords even less chance of a proper selection. "The great unpaid" are not remarkable for their wisdom, and it is difficult to say what motive would have most influence with them in their selection of a coroner. Political reasons would very probably have weight; private reasons most certainly would. Some would vote for the man who pledged himself to a blind and inefficient economy; while a few possibly would vote for him whose knowledge, training, and character offered some guarantee for the protection of the public. The conduct of the Middlesex magistrates in regard to their coroners has never been reassuring, since the bench seem agreed to consider that the cheapest coroner must necessarily be the best; and they have never failed to encourage these important officers to vie with each other for the honour of holding the least number of inquests in the cheapest manner. Again, there can be little doubt that the superannuation allowance will vary in amount according to the popularity of the coroner with his masters, and thus an incentive will be offered to a coroner to fall in with the views entertained by the majority of the magistrates (be they never so mercenary) as to what constitutes efficiency. We cannot think that the changes proposed in this Bill are at all likely to prove of much service, since one bad mode of election is replaced by another equally bad, if not worse; and although the superannuation is only a proper recognition of long and faithful service, we do not feel sure that the expectancy of it may not have an undue and evil influence on the conduct of the officer.

If a change is to be made in the appointment of coroner, it would be better to place the matter in the hands of the Home Secretary, who might be aided in his choice by having submitted to him by the local authority a list of two or three persons eligible for the office. Surely it would be better to have the appointment made by one who has no interest in the financial aspects of the question, and who would be liable to be questioned in the House in case of the perpetration of a job, than by the keepers of the county purse, who are answerable to no one for their acts, or for the motives which prompt them.

Annotations.

"Ne quid nimis."

ROYAL COLLEGE OF SURGEONS ELECTIONS.

MR. PRESCOTT HEWETT has, in deference, we believe, to the opinions and advice of many of his colleagues, consented to submit himself for re-election into the Council of the Royal College of Surgeons. Mr. Hewett is at present junior vice-president, and is of course near the presidential chair; we are glad, therefore, that he has reconsidered his previous decision to retire. Mr. Birkett and Mr. Spencer Smith are also prepared to stand for re-election, while there are two or three aspirants who intend to contest the seats. Mr. Cooper Forster is certainly the most formidable opponent, and, seeing that Mr. Birkett is a friend and colleague, the only legitimate inference to be drawn is that Mr. Forster intends to fight Mr. Spencer Smith—with what success we are content to wait for. It may be well, perhaps, to lay before our readers what is the relative position of members of Council who are re-elected. If a member be re-elected, he takes precedence of all other persons who may be elected into the Council on the same day, and, with respect to the general body of the Council, he takes precedence according to his former seniority in the Council. It follows, therefore, that, if re-elected, Mr. Prescott Hewett will, according to the usual custom, become senior vice-president, and Mr. Spencer Smith the junior vice-president. The latter, however, is scarcely probable with so weighty an antagonist as Mr. Cooper Forster, whose recent election to the post of

examiner augurs well for his chances of a seat on the Council. Other candidates are in the field, and amongst these is Mr. Smee, an honorary fellow of 1855, and author of "Electro-Biology" and many other interesting works. Mr. Henry Smith, who last year fell so little short of success, will not contest this year, in consideration of the claims of his senior, Mr. Forster. Mr. Hussey, of Oxford, is again a candidate.

CORONERS AND MEDICAL WITNESSES.

AN inquest was held in the East-end of London a few days ago on the body of a woman who had been attended by a homœopathic practitioner named Smith, and who describes himself as a "Member of the College of Physicians and Surgeons of Canada." The deceased woman was induced by the perusal of a printed circular which had been thrust under her door to call in Mr. Smith, who visited her five times, and gave her several bottles of medicine. She appears to have died rather suddenly, not, however, before she had been seen (while moribund) by a qualified surgeon.

It was elicited during the inquiry which followed that Smith had given the husband a certificate of death, the invalidity of which determined an investigation into the case. Mr. Arthur Cæsar, parochial medical officer for Mile-end, who had been called in to see the woman, was requested to make a post-mortem examination, and after the autopsy he deposed that he found an abscess on the base of the brain, and pathological changes in the adjacent parts amply sufficient to account for death. Mr. Cæsar's evidence thus exonerated from blame the irregular practitioner. It is to be hoped, however, that the case will serve as a warning for the latter. We are glad to find that Mr. Cæsar was complimented by the coroner, Mr. Humphreys, for his management of the case. It is satisfactory that some of the "lay" coroners, as we feel constrained to term non-medical holders of the ancient office, are able to form a just appreciation of the value of intelligent medical testimony, and are ready to acknowledge that a complete elucidation of the cause of a suspicious or doubtful death cannot be arrived at without the services of a professional witness. As adding force and significance to our remarks, we give a short description of an inquest reported in the *Essex Times* of last Saturday. A man died very suddenly at Forest-gate without having received any medical attendance whatever, and under conditions which pointed to the paramount necessity of making an examination of the body. He had vomited some "dark blood" before he died, and made a "snoring noise." After what strikes us as a singularly irrelevant colloquy between the coroner and a female witness, the following occurred, which we quote in its entirety:—"The coroner briefly summed up, pointing out that all the symptoms spoke of (*sic*) were consistent with death from apoplexy.—A Juror: But there was no doctor, as there ought to have been.—The Coroner: But a hundred doctors could not have told you more than I do. If that man's head was examined it would be found full of pulp, and the brain suffocated." After a brief consultation, the jury returned a verdict of "Death from Apoplexy." We dare not comment on the profound knowledge of cerebral lesions displayed by the coroner in this case.

CAPTAIN BOYTON.

CAPTAIN BOYTON may be fairly congratulated on the successful accomplishment of a feat which demonstrates the efficiency of his swimming apparatus, and the courage, self-reliance, and powers of endurance of its inventor. We are indebted to the courtesy of Dr. Diver, of Southsea, for the following interesting particulars. Dr. Diver saw Captain Boyton on the morning of the day he left Boulogne for Cape Grisnez, at the Hôtel Christol. He was in perfect health and spirits, and stated that he had been taking great care of himself, and living principally upon underdone beef-steaks and eggs. There was a contrast between the state of his health on this occasion and that on which he previously attempted to cross the Channel. He was received on board the *Prince Ernest* at about 2.30 on Saturday morning, when he had been about 23½ hours in the water. He was perspiring very freely, complained of a general stiffness, with pains in his wrists, from paddling. He stated that for the first few hours he suffered terribly, and that he even wished his dress might burst and he go down. He was very sleepy at this time, and actually slept in the water and dreamt, waking with a start, and finding himself paddling. Some very strong green tea was given to him, which dispelled all his unpleasant symptoms. The last two or three miles, he said, seemed never-ending to him, and he would not again go through what he had experienced for any money. He was undressed, sponged and rubbed down, and placed in hot blankets. His face was very red, and in some places the skin had cracked from exposure to the sun and salt water. He was fatigued, but not very much, considering what he had gone through. His face was greased, and cold wet rags afterwards applied to it, which relieved him much. His pulse was 71, and his temperature 99°. The action of his heart was feeble, but this is natural in him, and was observed on the former occasion. He was full of spirits at his success. In about an hour he walked to the Pavilion Hotel, looking, with the exception of his face, very little the worse for his interesting trip.

TEETOTALISM AT THE ARCTIC.

AMONG the points of interest connected with the Arctic Expedition there is one of minor importance to which some little attention and observation will nevertheless be directed by medical officers. We allude to the dietetic value and physiological effects of alcohol in preserving the health and strength of the sailors under the exceptional circumstances in which they will find themselves. The crews of the vessels taking part in the expedition are exceedingly fine men in every way, capable, one would think, of encountering any hardships and of performing any work that it is within human power to accomplish; and, supposing their constitutional vigour to remain unimpaired, and their supplies of food and clothing to be adequate to their requirements, we are quite ready to believe that the consumption of alcoholic spirits might be found unnecessary or even injurious in the case of those who happened to be teetotalers. And Sir Wilfred Lawson and the friends of temperance will doubtless be glad to learn that there are several teetotalers among the sailors. One of the ice quarter-masters is stated to have made several voyages to the Polar regions without ever having broken his pledge of total abstinence. The medical officers of the expedition intend noting any difference in health or stamina between those who are total abstainers and those who consume their regulated allowance of grog. It will be remembered that the military forces in the Red River expedition under Sir Garnet Wolseley substituted cold tea for spirits, as was generally believed with much advantage, while some difference of opinion existed among those who joined the late expedition to Coomassie in regard to the utility of a spirit ration. As an officer remarked, "in the one case they seemed to live on the climate, and in the other the climate lived on them." Many, perhaps the majority, held that a regulated and small allowance of rum at the end of the day, or at the conclusion of a long and fatiguing march, had a beneficial effect on the system, and considered that it tended, when consumed with a meal, to

stimulate the appetite and remove the sense of depression and fatigue more quickly and effectively than did the same amount of food without the rum. Apart from variableness of climate, the nature of the duties and the amount and character of the food obtainable, we suspect that differences of habit, constitution, and temperament will be found to account for the differences that exist in this respect. A young and vigorous fellow, gifted with an appetite for anything, provided he can only get enough to satisfy his wants, who has never been accustomed to alcoholic stimulants, would be injured by their use unless under very exceptional circumstances. But there are others outwardly as strong and healthy-looking, and endowed with considerable powers of endurance, but with a more impressionable nervous system, who both feel and apparently are the better for a moderate amount of alcohol. The practice of one can hardly be a law to the other. After all, however, very much must necessarily turn upon the amount and nature of the duty done, and the readiness with which good and suitable food can be had.

HOSPITAL SUNDAY.

THE letter of the Lord Mayor to the daily papers, asking for their co-operation in regard to the approaching Hospital Sunday, is well worthy the attention of our daily contemporaries. Doubtless the Pulpit is the principal factor in the collection of the Hospital Sunday Fund, but the Press can immensely help the pulpit, and this is a cause thoroughly worthy of the energetic co-operation of both of these powers. The Lord Mayor puts the claims of the cause in a very good light. He shows the success of the movement in the past two years, and the beneficial result of recent discussions as to principles of distribution. He justly says in regard to past distributions that it is no light success to have given satisfaction to the great majority of the institutions. Even the dispensaries, as a whole, received last year above a thousand pounds more than they used to receive from local collections. The special hospitals will in future receive on the same basis as other hospitals. It is too much to expect that in the first few years of such an institution everybody should feel satisfied. But there cannot well henceforth be more than the most exceptional dissatisfaction. Under these circumstances the cause is most worthy, and our contemporaries would do a great service if on some day immediately preceding the 13th of June they would, from their own standpoint, commend this great cause in the interest of the sick and dying poor of London, whose case has never yet been adequately stated. A leader in every paper would add thousands to the fund.

THE LATE OCCURRENCE NEAR MILFORD.

OUR readers will doubtless have already seen some allusions in the general press to a very sad occurrence at Fort Hubberstone, near Milford, which has resulted in the premature death of a young officer named Lieutenant Walker, of the Royal Artillery, in consequence of a stab or wound alleged to have been inflicted by Dr. Alder, a medical officer and friend of the deceased. An inquest was held on Saturday last at the Fort, and after an inquiry which lasted over six hours, the jury returned a verdict of manslaughter against the medical officer in question. From the published accounts of the evidence in the *South Wales Daily News*, we gather that Lieutenant Walker, the deceased officer, was stationed at South-hook Fort, that on the night of the 21st May he dined at the officers' mess at Fort Hubberstone, and that he and Dr. Alder remained together in the mess-room at midnight, after all the other officers had retired. Between 1 and 2 o'clock Dr. Alder requested a corporal of the Royal Artillery, employed in the mess, to take two half-glasses of brandy and a bottle of soda-water to his room, which was accordingly done. Shortly afterwards, in consequence of an alarm raised by Dr. Alder, the unfortunate Lieutenant Walker was found lying on the floor of the room bleeding, and, as was subsequently ascertained, from a wound in the chest, apparently—for the description given of its position is not at all precise—about the region of the heart. Other officers were speedily in attendance, and a Dr. Griffiths was secured to attend upon the wounded man. The evidence would lead to the inference that the medical officer was considered a man of intemperate habits, and that he was probably intoxicated at the time of the occurrence in question. Dr. Alder alleged that the wound had been inflicted by the officer on himself, which the latter denied. At one time, however, Lieut. Walker averred that he had stabbed himself; but on subsequent occasions he declared that he had been stabbed by Dr. Alder, and he entered into a detailed account of the antecedent circumstances under which the injury was inflicted. The unhappy officer died on May 28th, having previously made and signed a statement to the effect that Dr. Alder had stabbed him in the chest. The medical evidence and account of the post-mortem examination are not given in any detail in the report of the inquest that has reached us; but we gather that the deceased officer's death, which was caused by secondary hæmorrhage, was accelerated by some disturbance of the wound caused by his wearing a tight-fitting jersey. The coroner committed Dr. Sydney Alder to prison for trial at the next assizes on a charge of manslaughter, in accordance with the verdict of the jury. The accused has served in the Crimea and in the late expedition to Ashanti. The jury, although by their verdict they attributed the death of the late Lieutenant Walker to the consequences of a wound inflicted by Dr. Alder, added that the said wound was inflicted without malice aforethought.

ACTION ON THE ECONOMY OF THE DERIVATES OF THE BILIARY ACIDS.

MM. FETZ and RITTER (Robin's *Journal de l'Anatomie*, 1875) observe that the biliary acids undergo great alterations after their entry into the intestinal canal, sodium glycocholate becoming decomposed into cholalic acid and glycocoll, and the taurocholate into cholalic acid and taurine. They determined to make a series of experiments on the effects on *cholalic* acid, the factor common to both these decompositions. They first tried the effects of *sodium cholalate*, and found that it possessed an action resembling, but much feebler than, that of the taurocholate and glycocholates. The urine never became sanguinolent, and only occasionally contained traces of colouring matter. The blood did not appear to have undergone any alteration. They next tried the effects of *choloidic acid*, and found that its action also resembled that of the tauro- and glycocholates, but was very much feebler. The next substance was *dyslysin*, which they found, when injected into the blood, did not exert any sensible action on the body. *Glycocoll* again exerted no immediate toxic action. Experiments made with *taurine* showed that when injected into the blood of dogs it did not exert any appreciable toxic action, but that it was in great part eliminated by the kidneys without undergoing any alteration. *Bilirubine*, the principal colouring matter of the bile, when injected into the blood, caused no serious effect beyond obstinate constipation. A transient subicteric effect was only observed when large quantities were thrown in. It appeared to cause an increase in the total amount of urine eliminated, by which it was quickly discharged from the body. A portion of it thus eliminated certainly underwent no alteration, since the usual play of colours resulted from the action of nitric acid. A part, however, seemed to undergo change, since the play

of colours became less and less marked, the blue tint first failing, and then the green, just as occurs on exposure of bile to air. None could be found in the fæces. Lastly, in regard to *cholesterine*, it appears that it has *per se* no toxic action, but if it accumulate in the blood in quantities sufficient to pass the maximum solubility of that fluid for it, it is liable to produce embolism.

PHARMACY IN IRELAND.

OUR readers are aware that a very absurd state of the law in Ireland has led to a great scarcity of chemists and druggists. The law—the Apothecaries Act of 1871—required all persons opening shops or practising the art and mystery of an apothecary to be examined by, and receive the qualification of, the Governor and Directors of the Apothecaries' Hall, Dublin. This examination includes subjects such as anatomy, practice of medicine, &c., necessary to medical men, but quite superfluous in those keeping open shop for the purpose of retailing and dispensing medicines and poisons. We are glad to see that the Government has now brought in a Bill for the amendment of a state of the law which has led to great public inconvenience. The Bill sensibly proposes the constitution and incorporation of a Pharmaceutical Society for Ireland, the council of which shall have the power to appoint a registrar to register persons duly qualified to act as pharmaceutical chemists in Ireland. All persons desiring to be so qualified are to be examined—the examiners to be appointed and the examinations arranged by the council—in Latin and English, in arithmetic, botany, materia medica, pharmaceutical and general chemistry, practical pharmacy, the British Pharmacopœia, &c. But the Bill expressly provides that they shall not be examined in the theory and practice of medicine, surgery, or midwifery, or any branch of medicine or surgery. Pharmaceutical chemists of Ireland will be entitled to be registered as pharmaceutical chemists in England and *vice versâ*. This seems to us a thoroughly sensible Bill, and we hope that it will become law before the session is much older.

VILLAGE SANITATION.

THE best method of disposing of the sewage and refuse matters of villages, hamlets, and farmhouses, is a problem that still requires satisfactory solution. We are therefore pleased to notice that the means of preventing excremental nuisances in towns and villages has been the subject of a special report by Mr. Netten Radcliffe, which is now given to the public in the Supplemental Report of the Medical Officer of the Local Government Board and Privy Council for 1874. After pointing out the difficulties that are experienced in dealing with, and utilising readily, economically, and inoffensively the liquid house refuse of villages and separate houses, Mr. Radcliffe proceeds to describe a tank designed by Messrs. Bailey Denton and Field to meet these difficulties. This tank, which the designers call the "automatic sewage meter," has been employed for three years at Eastwick, a small hamlet containing thirteen houses, and situate near Leatherhead. The tank or meter has a capacity of 500 gallons, and is double, so that it can be cleaned without entire disuse. It fills and discharges itself about three times in two days, and the discharge passes on to land prepared to receive it. Luxuriant crops have been grown upon the irrigated land, the estimated value of which is stated at £25 per annum, or £32 per acre, the outlay for attendance and repairs for the meter being £7 16s., which leaves a profit of £17. The cost of construction was £320, so that a return of 5 per cent. on the capital expended is gained. Mr. Radcliffe reports on the arrangements at Eastwick as being the most complete and satisfactory he has yet seen. Although the land on which the meter discharges itself is in close proximity to the mansion, no nuisance is experienced from it, as was the case when the slops and refuse water were turned into the open ditches and allowed to decompose there. Mr. Radcliffe concludes his notice with the following remark:—"It simplifies the whole question of dealing with sewage of small towns, villages, isolated institutions, and mansions, while securing the most efficient application of the sewage to land, both for purification and utilisation, with the least expenditure of labour." We have carefully inquired into the arrangements, as carried out at Eastwick, and can endorse the above statement in every particular. We are glad, however, of the opportunity the report has afforded us of bringing Mr. Denton's tank prominently before the notice of the public. We are sure that many rural districts will be glad to adopt such simple, inexpensive, and effectual means of dealing with their sewage and refuse liquids as this apparatus affords.

THE ST. PANCRAS GUARDIANS.

WHATEVER may be thought of the unseemly squabbles which so often occur at the meetings of the St. Pancras guardians, there is now and again evidence to show that the representatives of the parish are not unmindful of the more serious duties devolving upon them. In especial they now exhibit a commendable care in all matters affecting the sanitary integrity of the district. The Vaccination Acts are enforced in St. Pancras with a stringency that we would gladly see followed elsewhere. In the four months ending September, 1874, there were born in the parish 2637 children, of which number 1474 were not vaccinated within the period prescribed by the law. The board sent an official notice to the parents of these children requiring immediate compliance with the Act, with the result that 947 more children were vaccinated in a short time. The remaining 527 are accounted for as follows:—192 cases removed and present residence not known; 20 cases removed to and reported in other parishes; 227 dead; 24 postponed in consequence of illness, as shown by medical certificate; and 64 only outstanding. The parents of these latter 64 children have now received peremptory notice to vaccinate their offspring within fourteen days. It is stated that in the previous quarter's returns there were only two defaulters. When compliance with the provisions of the law is resisted punishment by fine or imprisonment is sought for by the guardians.

SEWAGE IN THE UPPER THAMES.

THE condition of the Thames, whether considered as the source of the metropolitan water-supply or with reference to the health of the residents on either bank, or as one of the most favourite resorts of holiday-makers, is a subject of vital importance and interest to several millions of people. To many of these the evidence of Mr. Leach, the engineer to the Thames Conservancy Board, recently given at the Local Government Board inquiry at Abingdon, will afford ground for congratulation. Mr. Leach stated that a vast number of notices had been served upon local authorities and upon individuals requiring them to cease polluting the Thames with their sewage, and that in a very large proportion of cases these requirements of the Conservators had been met by disconnecting the objectionable drains from the river. At Staines, Wallingford, Henley, Marlow, Egham, and Lechlade, the sewage is said to run into the river no longer, but to be intercepted by cesspools. Such an arrangement must be in many cases of a temporary

character, and full of danger to the water-supply of the towns if this be derived from local wells; but the condition of the Thames is undoubtedly improving under the change. The Maidenhead sewage, we are told, is utilised on the land. Drainage schemes are in progress at Oxford, Reading, and Windsor; and at Chertsey and Slough much of the sewage has been intercepted. Indeed, Mr. Leach said, in conclusion, that there were now no offensive drains emptying into the river with the exception of those from towns whose drainage works were in progress but not yet completed. The subject of the inquiry at Abingdon, at which this gratifying evidence was given, was an application from the Corporation of that borough for compulsory powers to purchase land for a sewage-farm, as it is proposed to carry out in this town a drainage scheme, under the advice of Mr. J. Bailey Denton, for disposal of the sewage by intermittent downward filtration combined with irrigation.

"THE BRITISH MEDICAL DEFENCE ASSOCIATION."

THIS Association, in our opinion, aims at accomplishing that which in no way comes within the province of a medical man. The meeting, the proceedings at which we reported last week, does not appear to have been important either from the number or the professional position of those who attended it, and although the epithet "British Medical" is applied to it, we have no reason to suppose that it has any connexion with the British Medical Association. The meeting was unanimous in passing a resolution approving the formation of a Society "for the suppression, by every legitimate means, of medical and surgical practice by unqualified persons." In other words, the Association wishes to take upon itself the functions which should belong to the Government or a public prosecutor, and to appear in the eyes of the public to play an undignified part similar to that performed by the committee of a trade's union. Seeing that the Association is not numerically strong, and that the subscription is only half-a-guinea, we are happy in feeling certain that litigation is a luxury in which it cannot indulge without incurring bankruptcy. Meanwhile, we think that an important title should not be assumed by a handful of men who may appear to the public as representatives of the profession to which they belong, although within the profession it is perfectly understood that they have no title to be so considered.

DRAINAGE AND HEALTH OF BRIGHTON.

WE fear that, in spite of all that has been spent on it, the drainage of Brighton is still in a somewhat dangerous condition. It appears from a recent county court dispute that there are, at any rate in Hove, houses which even now are unconnected with the sewers. Similar reports frequently reach us, and it seems evident that a good deal is still radically wrong. We are informed that cesspools continue in use throughout a large portion of Hove, and in many places the old main sewers are in a very unsatisfactory state.

The same number of the *Sussex Daily News* in which the report of the above-mentioned trial appeared contained the vital statistics of Brighton for the previous quarter. The average death-rate was given as 30·3, a portentously high figure, and one that may well give serious anxiety to the town authorities, especially as the deaths from the seven principal zymotic diseases are reported to be on the increase.

We cannot help suspecting a connexion between the two unpleasant points which we have noticed. The town has done much in the way of sanitary reform, but it has still much to accomplish, and until the drainage system is universally adopted, with proper inspection of the house communication and adequate provision for flushing, no true security can be attained. Meantime let the authorities remember that a death-rate of 30 in the 1000, even in the bad quarter of the year, is in itself a grave accusation against them, and a serious injury to the town.

HOSPITAL FOR INFECTIOUS DISEASES AT MORECAMBE.

THE prevalence of infectious diseases cannot be successfully combated without special hospital accommodation, and in no localities is it more clearly to the interest of the residents to possess the means for successfully isolating and treating cases of infectious diseases than in watering-places. The question of the erection of such a hospital was the "burning question" at the recent annual election of the Morecambe Local Board, and a candidate well known to be a supporter of the hospital scheme was returned at the head of the poll. The question came on for final decision at the recent adjourned monthly meeting of the board, and, after some discussion, the proposal that the erection of the hospital be proceeded with was carried by five votes to three. One of the strongest arguments urged in support of the proposal was that small-pox was now very prevalent in several parts of Yorkshire, from which county Morecambe receives its principal contingent of visitors, and if the disease were to be imported into this watering-place without the existence of the means for the isolation of the early cases, the ratepayers might soon lose ten times over what the erection and maintenance of the hospital would cost. It is satisfactory to find that such practical arguments prevailed in Morecambe.

THE BARK OF MANCONA.

M. CLAUDE BERNARD has communicated to the Academy of Sciences of Paris the researches of Messrs. Gallois and Hardy touching the toxic effects of this bark. In tropical Africa some tribes use it to poison arrows and to try the guilt of supposed criminals. The tree which furnishes it is called "Erytrophlæum guineense," belonging to the leguminous family. It may grow to the height of thirty yards, and measure two yards in diameter. The inhabitants name it the *tali*. Messrs. Gallois and Hardy have succeeded in concentrating the active principle; and, having injected a solution under the skin of guinea-pigs, frogs, and kittens, they found that it lowered the action of the heart, and finally altogether arrested its movements. This phenomenon has been noticed through a series of experiments, the heart always stopping with the systole. Sulphate of atropine injected immediately after the erythrophlæum did not hinder the effects of the latter.

CHARITY VOTING REFORM.

As we have hitherto always been, and shall continue to be, supporters of the Charity Voting Reform Association, it is well to remind those of our readers—and they are many—interested in the prosperity of the Royal Medical Benevolent College that the petition now being signed by many of the subscribers, with a view to strengthen the hands of the Association, may presage important results. We take it that those who believe in the existence of a grave evil in the present system of voting at charitable institutions have sufficiently proved their point, though at the same time it must be confessed that up to the present moment they have failed to find, or, at all events, to demonstrate, a satisfactory remedy. But the existence of the evil being acknowledged by a large proportion of our own profession, we take it to

be incumbent on the Council of the Medical Benevolent College to reconsider their determination, announced at the previous meeting, not to interfere with present arrangements. Even if, as Dr. Carr remarks, "a sound and healthy progress marks every phase of the life of the College," the fact says nothing and proves nothing as to the mode of election of either scholars or pensioners; and all who have worked and spent time and money for either have very good reason to know that the same unsatisfactory condition of things exists at the College elections as at other charitable institutions, and that the weaker—i.e., the friendless—emphatically go to the wall.

ADDRESS BY MR. LYON PLAYFAIR, M.P.

ON Thursday last Mr. Lyon Playfair delivered an address on the occasion of the distribution of prizes to successful students at King's College. After glancing back at the time when he was a student of medicine in the College in Gower-street, he proceeded to describe the rapid strides made in medicine within recent years, not a single branch of which is not now under the dominion of science. Great educational acquirements are now required of those entering the profession, and there is no class of men who receive a more catholic kind of mental training. A medical man of the present day cannot be a narrow man. His work is too varied to render it possible for him to see society through monochromatic spectacles. The sacredness of the relations of medical men to their patients was then touched upon. They held a trust which was rarely betrayed. After dealing with some of the public questions of the day, and alluding to the common sources of epidemic disease, Mr. Playfair pointedly referred to the blind prejudice against doctors which exists in certain quarters of the public service. We are glad to find that the lecturer made a defence of the practice of vivisection within reasonable and well-marked limits, and proved that the investigation of vital phenomena by observation and experiment is enlarging the domain of medicine and multiplying its remedial agents. The address was brought to a close in a few well-chosen words of congratulation and wishes for future success.

A GOOD SUGGESTION.

Apropos of the question of "Drunk or dying?" a very good suggestion has been made by a writer in *The Times* who signs himself "A Hospital Surgeon." He suggests that an "out-patient ward" should be established in every hospital, in which patients who are admitted in a state of insensibility might remain until consciousness was restored or the real cause of the unconsciousness declared itself. In this way the annoyance of admitting noisy drunken patients to the general ward would be avoided, and the risk of mistaking fatal for trifling complaints would be reduced to a minimum. This out-patient ward would also serve the purpose of affordieg to new cases of accident a temporary asylum, in which preliminary dressings might be applied or the necessary preparations for operation be made, previous to their being permanently removed to the in-patient wards of the hospital. The suggestion is one which we trust will be put in practice wherever the necessary space for the new ward can be commanded.

PURIFICATION OF THE CAM.

WE have received a letter on this subject from a gentleman resident in Cambridge, which we publish in another part of our columns. We are not surprised at his statement that many men have had to "go down" this term, on account of ill-health. The fetid miasm arising from the Cam must have a most injurious influence on the health of those exposed to it. And this is the term of all others when men are most on the river. We would remind our correspondent, however, that the attempts to purify the Cam have not fallen through from want of knowledge, but from want of union between the town and University, which has prevented the Improvement Commissioners applying to Parliament to do away with the restrictions which now hamper them, and seeking fresh powers enabling them to carry out the plans that have been prepared by sanitary engineers, and have been for years in the hands of the Improvement Commissioners. We do not despair that these differences may yet be amicably settled, if gentlemen like our correspondent will come forward and represent the town interest on the sanitary board. The questions at issue can only be dealt with by liberal-minded and educated gentlemen, and the ratepayers, if they wish to see the town truly prosperous, must contrive that such shall in future be elected to represent them.

ARMY MEDICAL DEPARTMENT.

WE would call the attention of medical officers in the army to a report in another part of our columns in which the result of a deputation to Mr. Gathorne Hardy on the alleged grievances of our brethren in the service is set forth.

THE annual meeting of the supporters of the Hospital for Consumption and Diseases of the Chest situated at Brompton, was held last week under the presidency of the Earl of Derby. It appeared from the report read that an exceptionally large number of in-patients had been treated at the institution during the year. In the out-patient department 15,526 persons had been under the care of the medical staff, a considerable numerical increase as compared with the year 1873. The total receipts had been £17,072, and the expenditure £15,734, thus showing a very fair balance for the work of the current year. By an increase in the number of beds accommodation is now afforded to 257 patients. Drs. Cotton and Quain have been appointed consulting physicians to the hospital, in recognition of services extending over nearly thirty years. We observe that an expression of regret is made by the governors at the uncertain income derivable from legacies. Surely there is no legitimate cause of complaint in this respect. It is but a very short time since the large sum of £100,000 was left to the hospital by an eccentric lady in Blackfriars.

THE 85th Regiment, now at Meerut, has been suffering rather severely from enteric fever. The disease is supposed to have been contracted at Khoorga while the troops were on the march. In the course of six weeks nineteen soldiers presenting undoubted evidences of typhoid were admitted into the hospital. The sanitary condition of Khoorga for some time has been notoriously bad, sewage-polluted wells being the rule. It is instructive to learn that the men who were attacked were not the young and newly-arrived, but men over twenty-five years of age, and who had been seasoned by several years' residence in India. This fact goes against the experience of most medical officers in the Indian army.

A MUNIFICENT anonymous benefactor of medical charities died recently, in the person of Miss Eliza Dawson, of Bramhope Manor, near Otley, Yorkshire. About six years ago Miss Dawson gave sums of money in all amounting to over £10,000 to the Bradford charities and institutions—a stipulation being attached that no public announcement should be made of the donations, and that the name of the benevolent giver should be withheld.

MR. S. T. STEELE, medical officer of health for the combined sanitary districts of Todmorden, in a report, just published, has, like so many of his *confrères*, to deplore the excessive amount of infantile mortality prevailing in the locality. Mr. Steele considers one of the chief causes of the high death-rate of babies to be the fact that married women work at mills and manufactories during the whole period of gestation, and when they have been delivered they return to their work with the least possible delay. The offspring is then reared in a haphazard manner, without its natural food and under nobody's particular protection. What with soothing syrups and patent foods, and the absence of maternal care, the infant soon succumbs. We would advise that in all centres of industry where there is a large employment of female labour *crèches* or nurseries should be established. They cost very little, are most easily worked, and would confer inestimable benefit on mothers who, through absolute necessity or improvidence, are unable to rear their young.

FATAL visitations of "plague" continue to be reported on the Turco-Persian frontier, and we learn that a medical commission, composed of four doctors, has been investigating into the conditions of the outbreaks. In one village, with a population of 1500 inhabitants, 100 deaths occurred. If the scheme of laying a railroad along the valley of the Euphrates—which has long been the dream of Anglo-Indian engineers—should ever be consummated, the realisation of the project would be the means of greatly reducing visitations of epidemic diseases, which now at periodic intervals desolate the country. A stream of European emigration from Aleppo to Bassorah would work incalculable good in a tract of land every foot of which is pregnant with sacred and historic associations. A junction at Baghdad or on the site of ancient Babylon, of whose beautiful gardens nothing now remains but a reedy morass, is by no means impossible, even in the near future.

THE town of Bradford would seem to be seldom free from the pressure of a high death-rate. The average annual mortality has lately been over 32 per 1000. A large proportion of infantile deaths continues to be recorded. Scarlet fever, erysipelas, and puerperal fever figure in the list of diseases that have proved fatal during the past month. The number of fatal cases in which the death was "not certified" would indicate the presence of several unqualified practitioners in Bradford.

A REMARKABLE case occurred last week in the Irish Court of Queen's Bench. A motion was made and granted to draw out of court a sum of £1500 tendered by the governors and directors of the Apothecaries' Hall, Dublin, as compensation for the consequences of their mistake in selling a packet of sulphide of antimony for oxide of manganese. Through the explosion of the sulphide a man named Marsden lost his life, while his wife and children were severely wounded.

THE summons which the Corporation of Dublin lately served upon the Port and Docks Board, for neglecting to keep the Liffey in a proper condition, having been dismissed, an appeal from the decision of the magistrate was submitted to the Court of Queen's Bench, and judgment given in favour of the Port and Docks Board.

THE Public Health Bill passed through Committee in the House of Commons on the 28th of March. We shall reserve comments on the Bill until it is published with the amendments received in its passage through Committee.

SPECIAL REPORT
ON
THE POLICE-CELLS OF THE METROPOLIS.

THE general plan and arrangement of these cells is similar at all the metropolitan police-stations, a description therefore of one will serve for all. The cells are situated in the farthest part of the building, and are reached through the inspectors' office and charge-room. The doors of the cells open into a corridor, which is about four feet wide. Generally the cells are situated at one side only of the corridor, but in some cells are on both sides. The number of cells in each corridor varies in number, being six at Bow-street, and three, four, and five at other stations visited. These corridors communicate freely with the outer air of the courtyard by means of windows, which are kept open in summer; in winter ventilation is secured by a hot-air stove, which supplies a sufficient quantity of warm fresh air. The door of each cell has a perforated iron plate fitted into the upper and lower panels, through which the outer air passes into the interior. In the roof of the cell are two openings covered with gratings, which permit the passage out of the foul air. The corridor is well lighted, and opposite each cell is a powerful jet, with a reflector behind it, which casts a brilliant light through a small window into the cell. This is a recent improvement, and greatly diminishes one of the greatest hardships of incarceration—to wit, the dreary darkness. The cell itself is oblong in form, of the following average dimensions — namely, nine feet long, nine feet six inches high, by six feet wide, giving a capacity of 513 cubic feet. This capacity is sufficient considering the means adopted for ventilation for one or two prisoners, but is decidedly insufficient if more are locked up. A low wooden bench runs round three-parts of the cell, on which the prisoners repose; no pillow or head-rest is furnished, except in cases of insensibility from drink. At the end of each cell nearest the door is a watercloset, furnished with a lid, the pan of which is flushed by a water-supply turned on from the outside periodically by the policemen in charge. The floor of the cell is usually of asphalte, flat, and strewed with sawdust to absorb the vomit and excrement which the inmates too frequently discharge on the floor, instead of making use of the closet provided for the purpose. At every station there is one cell furnished with a sloping wooden floor, which is daily removed for cleansing; these cells are reserved for the worst cases of drunkenness. We think it would be a great improvement if all the floors were made sloping, with a gutter to drain off at once the liquid filth; it sometimes happens now that the stream finds its way under the cell door, and flows out into the corridor. There is no systematic accommodation for washing, but a basin of water, soap, and towel are at the service of all who wish to make their toilet before appearing before the magistrate. Bread and coffee are served out twice daily to all the prisoners, and those who have money are allowed to send out for any other articles of diet they may require. The inspectors evidently endeavour to classify their prisoners; and, under ordinary circumstances, they can have no difficulty in doing so, for the cell accommodation is above the average requirements. In one of the West-end stations we visited, a special cell is reserved for prisoners of a better class. A change of clothing is supplied in case of prisoners being brought in wet, whilst their own are being dried at the station fire. The divisional surgeon, or in cases of emergency the nearest medical man, is sent for in all cases of illness. We will now pass on

to a brief description of some of the police-stations visited by us.

Bethnal-green.—This station has five cells; at the time of our visit, 11.40 P.M. on Monday night, there were three cells occupied; two, each containing a drunken man fast asleep, and one, a very noisily drunken individual who was awaiting bail. We examined the charge sheet for May, and found that during that month 120 charges had been admitted to the cells, an average of 3·08 per diem, whilst the accommodation, as above said, gave five cells, sufficient, in our estimation, to hold ten persons without overcrowding. The cells were sweet, fresh, and scrupulously clean; the temperature in corridor was 62° F.

Leman street.—This station is situated in the districts of Ratcliffe Highway and Whitechapel, and the class usually admitted is of the very lowest order. There are five cells; at the time of our visit, 12 30 A.M. Tuesday morning, there were four inmates in separate cells: two women, one drunk and noisy; the other, who had been in some hours, getting sober and thirsty; one man dead drunk, the other sober, or partly so—an assault case. A drunken woman was being passed into the cells just as we were leaving. The average daily number of charges received during May, as gathered from the charge-sheet, was 6·01, the accommodation provided being sufficient, we think, for ten. This is perhaps hardly verge enough to meet special requirements, and a few cells might be added with advantage. The cells and corridors were clean and thoroughly well ventilated; temperature in corridor, 64° F.

Bow-street.—This was the largest station visited, and we believe it is the largest in the metropolis. Here there are sixteen cells and one double cell used for special prisoners. At the time of our visit—1.20 A.M. on Tuesday morning—only four cells were occupied, the inmates being two drunken men and two drunken women. During May, 400 charges had been admitted to cells, which gives a daily average of 12·9. The daily average for the year 1874, however, amounts to 28·08, the accommodation furnished being sufficient for thirty-six prisoners. It must be remembered, also, that many of the charges are admitted, at this station particularly, for a few hours only, and are released on bail. The actual number of prisoners confined, therefore, the whole night in cells is much below the average figures stated. We were pleased with all we saw at this station. Temperature of corridor 67° F. The fact that the temperature was higher at this station than at any of the others is accounted for by the furnace which supplies the hot air in winter having been lighted to show the method of ventilation employed during the winter months.

Marlborough-street has six cells, three on the ground-floor and one upstairs. At 1 50 A.M. there was one case in cells—a drunken female. The daily average of cases admitted during May was 3·06, accommodation being sufficient for twelve cases. Temperature in corridor 64° F. The arrangements in every respect satisfactory.

Marylebone police-station has twelve cells, eight of which are in use, the others at present undergoing repairs, white-washing, &c. Three cells were occupied at the time of our visit, 2.10 A.M. on Tuesday morning, by two drunken women and one lad. The daily number of cases admitted in May averaged 4·05, the cell accommodation being sufficient for sixteen. This station was in some little confusion owing to the repairs going on, but the cells were clean, sweet, and well ventilated.

In concluding our report we cannot but think that the facts we have elicited will be extremely satisfactory to the public mind. The police-cells of London are not overcrowded, for we have shown that on last Monday night, between the hours of 11.30 P.M. and 2.30 A.M., only sixteen people were in custody at five of the chief metropolitan stations, and the accommodation provided at these stations was amply sufficient for eighty prisoners. By an examination of the charge sheets at the stations we are convinced that overcrowding can only occur in very rare instances, and under very exceptional circumstances. If an individual, by foolish conduct or otherwise, is unfortunate enough to get himself locked up on these occasions, he may probably meet exceptionally unpleasant companions, but this is hardly a case to call for much sympathy, and we think the individual in question can scarcely expect the ratepayers to provide accommodation to meet such rare and extraordinary demands.

STATE MEDICINE.

THE third lecture of the course now being delivered before the Society of Apothecaries by Surgeon-Major F. De Chaumont took place on Saturday, the 29th ult., the topic discussed being "Water and its Supply."

The lecturer commenced by remarking that water is only second in importance to air itself. Without the agency of water no function would be possible, and Thales evinced a keen perception of its importance when he called it the beginning of all things. No food would be assimilable without water, and life can be sustained longer by water alone than by so-called "solid food" alone. Water forms about four-fifths of the human frame. It provides us with our most powerful mechanical forces, and is the most effective agent in cleanliness, whether personal or domestic. It doubtless plays an important part in washing the very air itself. A sudden outbreak of disease may be generally attributed to something wrong in the water-supply, water being, no doubt, notwithstanding opinions to the contrary, a very important carrier of *materies morbi*. It is difficult to get it free from all extraneous matters, all natural waters containing varying quantities of foreign substances, suspended and dissolved. The extraneous constituents of water may be divided into gaseous and solid, the latter including both dissolved matter and suspended matter. Among the gaseous contents of water are carbonic acid and air. In addition to these, there are occasionally found noxious gases resulting from decomposition, such as hydrogen sulphide, ammonium sulphide, and free ammonia. The dissolved solids are mineral and organic, with an intermediate class consisting of products of organic oxidation—namely, nitric acid, nitrous acid, and ammonium salts. A portion of the organic matter is capable of putrescence, while another portion, including urea and the fatty acids, is incapable of such a change. The suspended organic matter embraces certain bodies which are capable of reproduction, as spores, seeds, infusorial animals, and the eggs of parasites.

A good drinking water ought to be colourless, inodorous, and tasteless, except as concerns that brisk taste which is due to dissolved carbonic acid and air, and which relieves the liquid from the charge of being "flat." The pleasant taste of good drinking water must not be attributed to the presence of salts, for it may be accepted as a rule that water is unfit for drinking when those substances are present in sufficient quantity to impart a flavour to it. As to the chemical characters of drinking water, there ought to be a total, or almost total, absence of nitric and nitrous acids, chlorine sulphides, and hydrogen sulphides. Most waters, however, contain a slight trace of nitric acid, resulting from the oxidation of organic matter, chiefly animal. Albuminoid ammonia is admissible to the extent of 0·0056 grain in a gallon. Of lime from 2 to 5 grains a gallon may be allowed, and this quantity may be exceeded in waters derived from chalk. Phosphoric acid ought to be limited to a mere trace, as this is a body which in most cases is due to sewage. The changes that waters undergo by admixture with sewage, manufacturing and slaughterhouse refuse, &c., were then adverted to, as also the presence of alkaline chlorides and carbonates without any very material result. It is still a moot and undecided point as to whether the dissolved or suspended matters in water are the more dangerous. Of the various methods adopted severally by Frankland, Wanklyn, and Angus Smith for determining the latter, the first was undoubtedly the most accurate, but was very complicated, and the other two were infinitely simpler, and gave fairly accurate results. In discussing the presence of albuminoid ammonia in water, it must be remembered that its existence must not invariably be regarded as an evidence of disease. A diagram was referred to which, taking the Loch Katrine water as the standard, showed the proportion of albuminoid ammonia in samples of water severally from London, Southampton, Netley, Kinsale, St. Helena (brought by ship), and various country wells, and in some cases typhoid fever or diarrhœa as a consequence, or, at all events, a coincidence. Parkes, however, obtained

from dead leaves a large amount of albuminoid ammonia, and this fact alone should render us cautious in declaring its presence invariably connected with sewage, or other avoidable contamination. In spite, however, of Cuningham's theory, water may be, and often is, a most important feature in the discrimination of cholera, and one that, under no circumstances, can possibly be disregarded. It was a remarkable fact in connexion with the health of prisoners in our chief gaols that at Pentonville, where the water used comes from a deep well in the chalk, no case of typhoid fever has ever occurred, and equally favourable statistics were quoted on the authority of Dr. Zuckschwerdt, of Halle, as regards a large scholastic establishment in that city, the observations having extended over upwards of half a century. Plates, prepared by Dr. Denis Macdonald, R.N., Professor of Naval Hygiene at Netley, were exhibited, which showed the varieties of living creatures found in water. It is a noteworthy fact that analysis of the bilge water of ships returned from a long voyage shows a small amount of albuminoid ammonia, and very few living animals, those present being evidently in a starved and attenuated state from want of nitrogenous material. Bacteria and other forms of vegetable life are exceedingly common in well water, as well as nomads, miscellaneous débris, and amorphous matters, many of which latter are visible to the naked eye. In explaining the various means of purifying water, charcoal is above all materials most strongly recommendable. The difficulty of arresting impurities is exemplified by the fact that finely divided clay will pass through most varieties of filtering media. Animal is better than vegetable charcoal, care being taken to clean the charcoal periodically, either by washing, the permanganates, or heat. The best and simplest filters are probably those made after the plan of Major Crease, and now used in all the ships of the Royal, and many of those of the merchant, Navy.

The quantity of water necessary for each person in a civilised community ranges from 16 to 18 gallons per day, exclusive of that consumed for other than strictly social purposes. Glasgow is furnished with a supply equal to 50 gallons per head per day, Southampton 35, Liverpool 30, Sheffield 20, Nottingham 17, Norwich 12, and Derby 14 gallons per head per day; whereas in New York 300 gallons per head are consumed, and it is calculated that the inhabitants of ancient Rome expended 350 gallons per head per day.

The most usual sources of water are lakes and unpolluted streams. Wells are commonly used, and, if bored through the surface and clay strata, are often good sources of supply. But many wells in the neighbourhood of the sea are much influenced by the tides, and so-called surface wells are always and inevitably more or less contaminated from soakage with the sewage and other deposits from the inhabitants of the surrounding neighbourhood. It does not appear, however, that much legal aid is forthcoming to remedy this state of things, all provisions as to water-supply being permissive only.

In conclusion, the author referred, as a matter of comparison, to the great value attributed to a good water-supply by Plato, Herodotus, and Aristotle, and the governing authorities of Byzantium and ancient Rome. He also drew attention to the extensive appliances for storing water adopted from the earliest times in India, and particularly in Ceylon, and, having shown statistically that a proper supply for the United Kingdom would consume less than a seventh of the average rainfall, averred that, in this section of sanitary work, it was emphatically the duty of the State to provide for the health of its people.

ARMY MEDICAL DEPARTMENT.

DEPUTATION TO THE WAR OFFICE.

ON Thursday last a deputation from the Royal College of Surgeons of Ireland waited upon Mr. Gathorne Hardy, at the War Office, for the purpose of calling attention to certain grievances of medical officers of the army. The deputation consisted of Mr. Tufnell, the President of the College; Mr. Edward Hamilton, Vice-President; Mr. Macnamara, representative of the College at the Medical Council; accompanied by the Solicitor-General for Ireland, Sir Arthur Guinness, Sir P. O. Brien, Dr. Brady, Dr. O'Leary, Dr. Cameron, Dr. Lush, Mr. Gibson, and other gentlemen. Sir Wm. Muir, Director-General of the Army, was in attendance with Mr. Hardy.

The deputation was introduced by the Solicitor-General for Ireland.

Mr. Tufnell then read a memorial from the College, which, after drawing attention to the fact, that out of 938 medical officers of the army serving on full pay on the 1st of January last, 300 were licentiates of the College, stated that the former willingness to take service had greatly diminished, from a general distrust of the permanency of warrants affecting the Army Medical Department, from a dislike to the present unification scheme, and from the superior advantages offered by the Indian Medical Service. Without some substantial improvements, the memorialists believed that surgeons of superior attainments would not in future be found willing to enter the army. The following recommendations were appended as a schedule to the memorial:—

"The relative rank of medical officers to carry all allowances, which shall only bear one interpretation. Every medical officer to be entitled to sixty-one days' leave in the year, on full-pay and allowances; the arrangements for the performance of his duties to be made by the administration. Medical officers requiring additional leave on urgent grounds, to be granted it on pay only, without allowances, as other officers. Medical officers to be placed on the same footing as officers of the rest of the army as regards sick leave. Exchange to be allowed, and to be *bonâ fide*, the officer staying at home to take up the post vacated by the officer going abroad. Medical officers to be relieved of all the duties properly belonging to purveyors, and which do not in any way pertain to the profession in which they have been brought up. Promotion to the rank of Surgeon-Major to be fixed at twelve years of full-pay service, if not previously obtained. Medical officers of field rank to be entitled to forage. Surgeon-Majors after twenty years' service to rank as Lieutenant-Colonels, Deputy Surgeon-Generals as Colonels, and Surgeon-Generals as Major-Generals, *according to date of commission*. The tenure of office for administrative ranks to be limited to five years in each grade, or ten years in the two; officers so retired to receive the maximum rate of half-pay. The retirement of officers of the administrative ranks to be obligatory at sixty years of age, but on corresponding liberal terms. An increase in the present rate of voluntary retirements after twenty years' full pay service, and voluntary retirement to be unconditionally permitted after twenty-five years' full pay service. Those medical officers who have lost the prices paid for exchanges, or otherwise suffered pecuniary loss by the unification scheme, to receive compensation according to each individual case."

Dr. BRADY testified to a wide-spread feeling of discontent among the medical officers of the army at the inferior position held by them, as compared with that which they formerly occupied, and especially complained that in regard to leave of absence they were not treated in the same manner as combatant officers.

Sir P. O'BRIEN called attention to the altered rules with reference to forage and other matters, and contended that they tended to injure the prestige of medical officers, and prevent the *esprit de corps* which should prevail among them.

The statements in the memorial were further enforced by Mr. Hamilton, Mr. Gibson, Dr. Lush, and other gentlemen.

Mr. HARDY, in reply, said that last year he received a deputation from the British Medical Association, who brought before him in a different shape the alleged grievances of medical officers of the army. Since that time the subject had never been absent from his consideration, and he had made numerous calculations with reference to it. With regard to the proposed retirement at sixty years of age, he found that so far from its being generally advantageous, it would be extremely prejudicial to many officers, and the effect upon promotion would be very small. It often turned out on inquiry that remedies suggested from without would really be no remedies at all. The question of forage was not settled with reference to medical men only, and the regulations could not be altered without altering them far beyond the medical department. His predecessor supposed that by certain concessions that were made an equivalent

was in reality given for what was taken away. Last year he was asked to make promotion at the end of fifteen years' full pay service; now he was asked to promote at the end of twelve years; so that if he had assented to the former proposal it appeared that the question would not have been settled. With regard to the unification system, there did not appear to be a general agreement among medical officers. On the whole, the communications which reached him in the shape of letters and pamphlets showed the prevailing opinion to be in favour of the system with certain modifications; and to return to the regimental system would be almost impossible. Such steps in advance had been taken under the new system, that it would be very costly to alter it; it would alter the position of medical men which, as far as possible, had been regulated with a due regard to any interests they might have. Sir William Muir would confirm him in the statement that, as far as possible, the medical officers had been retained with the regiments. There was no desire to separate them from them; and in every respect his wish was that they should receive as full consideration as gentlemen of intelligence and education were entitled to, wherever they were placed. With regard to the question of relative rank, practically it was often only a question of choice of quarters, as to which it was almost impossible to lay down absolute rules. He had given directions that as far as possible the quarters of a medical officer should be marked peremptorily, so that he might be placed in the position best adapted to his duties; and that where they could not be so marked consideration should always be given to the peculiar character of the services to be rendered. He did not think it was possible to go beyond that. It would not be to the advantage of the service to lay down a hard-and-fast line. He was still giving his best attention to the question. He was sorry to be so long about it, but he had been endeavouring to ascertain what would really settle the question upon fair and reasonable terms, being sincerely anxious to leave no real grievance in the army, because he knew it was essential to get a good class of men to serve in it, and without fair terms they could not expect to obtain them.

After a few words from Mr. Tufnell (who said that the memorialists would be satisfied with such a modification of the unification scheme as had been introduced by Surgeon-General M uat in New Zealand) the deputation withdrew, thanking Mr. Hardy for his courtesy and consideration.

THE DISCUSSION ON PUERPERAL FEVER.

THIS discussion was resumed at the Obstetrical Society on Wednesday evening last, the attendance of members being very large, and the proceedings being prolonged to a late hour. The debate, which was preceded by the exhibition of several interesting specimens by Drs. Brunton, Galabin, Wallis, Hayes, and others, was opened by Dr. ARTHUR FARRE, who, premising that the object of the discussion was rather to take stock of our present knowledge than to elicit new facts, proceeded to give an outline of the views expounded by Dr. Kirtland in an essay on Childbed Fever, written more than a century ago, where the author points out that puerperal fever is simply a name for including all the varieties of febrile disease that are met with in childbed; advocating the rejection of the name as misleading. Dr. Farre then proceeded to consider the definition of "Puerperal Fever" contained in the Nomenclature of Diseases published by the Royal College of Physicians, and pointed out that the aim of such a definition was simply to aid practitioners in identifying the disease and not to serve as an explanation of its nature, and that no doctrinal statement was intended by its framers. The place the disease occupies in the "Nomenclature" is among the General Diseases next to Pyæmia, and far removed from the specific fevers. He then criticised the various questions propounded by Mr. Spencer Wells in opening the debate, and pointed out that these "questions" were framed rather on a syllogistic plan, and appeared to lead up to a conclusion. He knew of no form of contagious puerperal fever distinctly caused by a special morbid poison; and with regard to the second and third questions, he showed how the specific contagious fevers must necessarily be modified in parturient women, from their peculiar condition, evidenced by the processes of milk formation and involution of the uterus. These processes being arrested, effete matters accumulate in the system. He would rather speak of puerperal *fevers*, of which he distinguished three classes—(1) a simple irritative fever, without blood infection; (2) a fever, not of specific origin, of which the poison has no incubative period, and which runs an indefinite course; and (3) where there is specific blood infection. The first two varieties are the strictly "puerperal," but all three classes might be included under the term "post-partum." He concluded his remarks, which were listened to with great attention, by stating that he hoped at some future time to further develop his views.

Dr. SAVAGE followed in a long speech, chiefly devoted to the exposition of the septicæmic process, which he thought was at the root of all cases of puerperal fever.

Dr. WYNN WILLIAMS also maintained that all cases of puerperal fever were of septic origin, depending on the decomposition of clots, or injuries to the soft parts during labour, or to putrefactive changes in the lochia; that all treatment should be based upon the idea of preventing the septic processes. He urged the use of iodine, both as an intra-uterine antiseptic, and also as a means of personal disinfection by the practitioner, and concluded by characterising bacteria as a "delusion and a snare," and only to be regarded as the consequences of putrefaction.

Dr. PLAYFAIR, confining himself to the relation between the zymotic diseases and puerperal fever, denied the specificity of the latter, which he said arose from the contact of septic material with some lesions of continuity in the generative tract. Positive facts of the zymotic poisons inducing disease indistinguishable from puerperal fever were of far more value than negative facts adduced by some speakers. He fully agreed with Dr. Matthews Duncan as to the conduct of the practitioner, who should not ignore the facts, but, looking them fully in the face, should take all possible precautions to prevent his disseminating the disease.

Dr. TILT thought the influence of zymotic diseases in the production of puerperal fever had been overrated, and that too little importance had been attached to autogenesis, the condition of the uterus after delivery being eminently fitted for the absorption of septic materials. Hence he advocated early detection of lochial decomposition, which could only be properly met by intra-uterine injections of antiseptic fluids.

The debate was again adjourned.

Correspondence.

"Audi alteram partem."

THE PRIMARY EXAMINATION FOR THE FELLOWSHIP AT THE COLLEGE OF SURGEONS.

To the Editor of THE LANCET.

SIR,—The great interest taken by the profession in the Fellowship examinations induces me to call attention to some unique features in the Primary Examination. I would premise that I do not wish to take exception to its severity, but to the extreme uncertainty inherent therein as it is now conducted. It is notorious to everyone at all conversant with this examination that teachers constantly find that their best students in anatomy and physiology are referred, whilst inferior men often get through. Of the First M.B. Examination at the University of London—an examination in anatomy and physiology more nearly allied to the Primary Fellowship in its severity than any other—these complaints are never heard. The reasons for this difference are very striking, and demand some attention.

At the Primary Fellowship the number of questions is too small to be a fair test. Two questions only in anatomy are absurd enough, but what can be said when only two more are selected at random from the whole range of human and comparative physiology, histology, and development? In

such wide reading as these latter subjects compel, a candidate cannot be equally strong at all points, but the examination seems carefully intended to ignore this fact altogether, and to set a premium on that "chance" which all fair tests endeavour to eliminate. The candidate who has read little has the satisfactory feeling that, *if lucky*, he may be able to get good marks, as there are only two questions; whilst the better prepared man knows that, *if not lucky*, all his work and trouble are of no avail. The recent questions in physiology, &c., completely prove this view. The first was on starvation, and the second on the structure &c. of the genito-urinary mucous membrane. These are, of course, fair enough, but no one can for a moment contend that they afford the slightest clue to a candidate's knowledge on so extensive a group of subjects. Human and comparative physiology and development are conspicuous by their almost complete absence. As a contrast to the recent paper, a question, set two or three years ago, included the comparative anatomy and development of the mammalian brain. An increase in the number of questions would at once remedy this defect, and make the papers of different years more equal in range and severity.

The system of marking is very peculiar, and sometimes tells most unequally. The marks awarded are *good*, *moderate*, or *bad* for each section of the paper, and at each of the two *viva voce* tables. The best result, therefore, is a total of four good marks; a bad, or two moderates, are fatal. Of course, most average candidates fail by getting two moderates. The objections to a system so wanting in precision are sufficiently obvious. It is possible for one candidate to answer two questions extremely well—viz., one in each half of the paper,—and get a moderate in both sections, because the other two questions are not sufficiently answered; whilst another candidate, by answering only two questions well, if they be in the same section, gets a good mark for that part of the paper, and may, perchance, pass. If a certain number of marks were allotted for every question, these two candidates would have obtained the same total, which is manifestly a much more correct result. Again, as *good* is the maximum result obtainable by this method, the candidate who has written the best paper at the examination goes in for his *viva voce* with no advantage whatever over one who has barely satisfied the examiner. The system of awarding a definite number of marks, and of referring a candidate unless he attains a minimum in each subject or a sufficient aggregate, should be adopted in preference to the present plan. Moreover, why should candidates to whom two moderates have been awarded for their paper, and who are consequently plucked, be subjected to the unnecessary cruelty of a *viva voce* examination, when they cannot retrieve their fate by obtaining the best marks awarded for that *viva voce*? This anomaly happens at every examination, and so needlessly occupies the time of the examiners and of the candidates.

At all other *viva voce* examinations with which I am acquainted, the examiners exercise the option of examining a man until they have satisfied themselves of his possessing sufficient knowledge or otherwise. The warning note of the "fifteen minutes clock" must occasionally leave an examiner in a painful state of uncertainty whether he should give a moderate or a good, when a minute or two more would settle the doubt, and perhaps alter the fate of the unfortunate candidate.

The material on which candidates are examined demands every praise, but it would be more satisfactory if the examiners for such a high-class test were separated, as has often been suggested by you, into examiners in Anatomy and examiners in Physiology.

Apologising for the length of this letter,

I am, Sir, your obedient servant,

May 31st, 1875. W.

POST-MORTEM EXAMINATIONS.

To the Editor of THE LANCET.

SIR,—I fully concur with Mr. Cullingworth in his remarks on the important nature of the query which I submitted as to the mode in which his examination of the case of manual strangulation was conducted. Will you permit me to point out that there is, notwithstanding Mr. Cullingworth's clearly expressed views (in his letter appearing in your issue of to-day), still the *possibility* of a fallacy in his mode of examining the heart with a view to obtain evidence of its distended right cavities?

Mr. Cullingworth relates that the thorax was first opened, and the heart duly exposed by cutting into the pericardium. The heart, he goes on to say, "was separated by grasping the roots of the great vessels, and carefully cutting through them above the fingers," no mention of ligatures being made. Now, Sir, it is just this *separation* of the heart that I should deem needless, and liable to induce a fallacious observation. Why not at once, and before separating the heart, examine it *in situ*? Why not note whether or not its right cavities appear distended before allowing the possibility of their being emptied to occur by cutting through the vessels? The plan I have been accustomed to see pursued in investigations of this kind is that indicated by these queries, with the further conclusive test of slitting open the cavities of the right side whilst the heart remains undisturbed in any way, and still attached. In this way only, it appears to me, can the fact of distension, its amount or its absence, be clearly ascertained, and the chance of erroneous observation, small as it may seem, be guarded against. The division of the vessels and separation of the heart, as practised by Mr. Cullingworth, must necessarily cause blood, if present, to escape from the cavities, and the *clear* evidence of distension, to be obtained only by examining the heart *in situ*, to be lost. Once allow blood to escape, and, I should think, it would form a material point for the defence in a criminal case to inquire how far the medical evidence, after such procedure, can substantiate the presumption of asphyxia, *quoad* distension of the heart's right cavities, and as regards the *amount* of blood which may or may not have originally been therein contained.

Regarding the statement that emptiness of the right side of the heart may be occasionally met with in cases of asphyxia from various causes, I am aware (and as illustrated by Mr. Cullingworth's quotations from Taylor) that such a statement is frequently made. But I am by no means disposed to admit that the evidence in such cases is always reliable, since we rarely hear of the manner in which the examinations have been conducted, and I have shown how very readily a fallacy may exist. The idea that lung-engorgement may explain the empty state of the heart's cavities seems to me only to further complicate the subject, for then we shall have to account, not only for those few cases in which engorgement of the lungs appears to explain the heart's emptiness, but also for the great majority of instances in which a *full engorgement of the lungs coexists with a distended right side of the heart*.

I trust this amicable discussion of this important subject may have the effect of directing attention to a most vital point in medico-legal inquiries, and of showing that the first care of the medical expert should be, whatever the theoretical considerations which flow from his inquiries, to ensure the absolute certainty and correctness not only of his observations, but also of the mere manual operations upon which these observations depend.

I am, Sir, yours truly,

Edinburgh, May 29th, 1875. ANDREW WILSON.

P.S.—Permit me to add that the opinions expressed in the foregoing letter, and the mode of conducting medico-legal inquiries therein advocated, are derived from the practical teaching and advice of Dr. H. D. Littlejohn, the esteemed lecturer on medical jurisprudence in the Medical School of Edinburgh, a gentleman whose experience as a medical jurist is too well known in Scotland to need any comment from me. A. W.

VIVISECTION.—In the House of Lords, on May 28th, in reply to Lord Henniker, the Duke of Richmond said that it was the intention of the Government, as already stated by the Home Secretary in the other House, to issue a small Royal Commission to inquire into the question of vivisection; and it was desirable that there should be no legislation with regard to it until the Commission had reported. He therefore hoped the noble lord would not bring on his Bill, which was down on the paper for second reading. Lord Henniker accordingly, in deference to the wish expressed by the noble duke, consented to postpone the second reading of his Bill for a month.

Medical News.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on May 27th:—

White, Edward Arthur, Norwich.
Wright, William Henry, Skelmersdale, Lancashire.

MR. JOSEPH HENDERSON, of Auchinblae, has been thrown from his horse, and received such severe injuries about the neck and spine that but faint hopes are entertained of his recovery. The sad occurrence has caused the greatest sympathy in the neighbourhood, where he has practised for the last fifty years.

A RETIRED tradesman of Darlington was this week fined 20s. and costs for neglecting to take proper precautions to prevent the spread of infection from a case of small-pox which was in his house. The defendant sent the bedding and clothes, without information respecting them, to a laundress, and in the house where the infected clothing was washed a little boy subsequently contracted the disease and died.

MR. C. WINSTANLEY, M.R.C.S.E., was presented on leaving Hatfield, in consequence of ill-health, by his friends of Hatfield and neighbourhood, with a purse containing £85 to purchase a microscope, for his uniform kindness and attention to the sick poor of the district during a period of ten years.

BEQUESTS, &c., TO MEDICAL CHARITIES. — The Hon. Anne Cavendish Bentinck bequeathed £400 3 per cent. Consols to each of the following, viz.: The Hospital for Incurables, Putney; Charing Cross Hospital, Westminster Hospital, London Fever Hospital, Royal Free Hospital, Cancer Hospital, St. George's Hospital, Brompton Hospital for Consumption, St. Mary's Hospital, King's College Hospital, Middlesex Hospital, Sussex County Hospital, and the Samaritan Hospital. Mr. Peter Ormrod, banker and cotton spinner, bequeathed £2000 to the Bolton Infirmary and Dispensary. Mr. Virgil Pomfret bequeathed £1000 to the Ashford Cottage Infirmary.

Medical Appointments.

ABBOTT, C. E., M.R.C.S.E., has been appointed a House-Physician to the Royal Infirmary, Liverpool.

BAKER, A., L.R.C.P.Ed., L.M., M.R.C.S.E., has been appointed Medical Officer for the Aysgarth District of the Aysgarth Union, Yorkshire.

BRANFOOT, H. S., M.B., M.R.C.S.E., has been appointed Assistant Medical Officer to the Central London Sick Asylum District Asylum, Upper Holloway, vice Ledlard, appointed Medical Officer to the new Asylum, Cleveland-street.

BURY, E. C., M.D., M.R.C.S.E., has been appointed Senior Medical Officer to the North Cambridgeshire Cottage Hospital, Wisbeach, vice Maynard, resigned.

CARMICHAEL, W. S., M.D., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the South-East District of Edinburgh, vice Cuthbert, transferred to the North-West District.

CHEYNE, W. R., M.R.C.S.E., has been appointed a Surgeon in Ordinary to the Western General Dispensary, Marylebone-road, vice Norton, resigned.

CLUTTON, H. H., B.A., M.R.C.S.E., has been appointed a House-Surgeon to St. Thomas's Hospital.

CUTHBERT, C., M.D., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the North-West District of Edinburgh, vice Hammond, deceased.

DAVIES, A. E., Ph.D., F.C.S., F.L.S., of Worcester, Public Analyst for the County, has been appointed Public Analyst for Kidderminster: 21s. per analysis, and 21s. per day and travelling expenses when required to attend in Kidderminster.

ELLIOT, H. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed a House-Physician for six months to the Royal Infirmary, Edinburgh.

GAYLOR, E., L.R.C.P.Ed., L.M., L.F.P. & S. Glas., has been reappointed Medical Officer of Health for the Ripley Urban Sanitary District for two years: £20 per annum.

GRAY, F. A., L.R.C.P.L., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for No. 4 District of the Honiton Union, vice Morrell, resigned.

HAYWARD, W. J., L.K.Q.C.P.I., has been appointed a House-Surgeon to the Royal Infirmary, Liverpool.

HEYLEY, H., M.R.C.S.E., has been appointed Resident Clinical Assistant to St. Luke's Hospital for Lunatics.

HYATT, J. T., M.R.C.S.E., has been appointed Surgeon to the Shepton Mallet County Prison, vice Walker, retired.

JOHN, W., M.R.C.S.E., L.M., has been appointed Medical Officer of Health for the Haverfordwest Urban Sanitary District.

JONES, L., M.B., M.R.C.S.E., has been appointed Medical Officer to the Pembrey Copper and Colliery Works, the Bury Port Smelting Company, the Pembrey White Lead Works, and the Bury Port and Gwendraeth Valley Railway Company, vice Lewis, appointed Clinical Assistant at the West Riding Lunatic Asylum, Wakefield.

LOWNE, B. T., F.R.C.S.E., F.L.S., F.Z.S., has been appointed a Surgeon to the Great Northern Hospital; also a Clinical Assistant to the Royal London Ophthalmic Hospital.

LUCK, J. J., M.D., has been appointed Medical Officer to the Alveston District of the Stratford-on-Avon Union, Warwickshire.

MOIR, A., L.R.C.P.Ed., L.R.C.S.Ed., L.M., has been appointed Medical Officer to the City Parish Dispensary, Edinburgh, vice Cairns, deceased.

MOORE, A., L.K.Q.C.P.I., L.M., L.R.C.S.I., has been appointed Medical Officer for the Collooney Dispensary District of the Sligo Union, vice Armstrong, deceased.

MORISON, J. W., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer and Public Vaccinator for the Parish of Kirkcaldy, Fifeshire, vice Young, deceased.

PACKER, H., L.S.A.L., has been appointed Resident Obstetric Officer to Charing-cross Hospital, vice R. J. Pitt, whose term of office has expired.

PAUL, F. T., L.R.C.P.L., M.R.C.S.E., has been appointed Resident Medical Officer to the Royal Infirmary, Liverpool, vice Scale, resigned.

PHILPOT, J. H., M.B., has been appointed Physician to the St. Pancras and Northern Dispensary, vice J. Edgecombe, M.D., resigned.

POTTER, H. P., M.R.C.S.E., has been appointed a House-Surgeon to St. Thomas's Hospital.

PUGHE, R. N., M.R.C.S.E., has been appointed a House-Physician to the Royal Infirmary, Liverpool.

REW, J., M.R.C.S.E., has been appointed Medical Officer to the Luton Union Workhouse, vice Tomson, resigned.

RICHARDS, G., L.R.C.P.Ed., L.F.P. & S. Glas., L.M., has been appointed Medical Officer for the High Easter District of the Dunmow Union, Essex.

ROSSITER, G. F., M.R.C.S.E., has been appointed a House-Physician to St. Thomas's Hospital.

SCOTT, T. H., L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer to the Workhouse, Dromore West Union, vice Mahon, resigned.

SHERA, H. A., M.R.C.S.E., L.R.C.P.Ed., has been appointed Assistant House-Surgeon to the Sheffield Public Hospital and Dispensary, vice Reid, resigned.

SQUIRE, W., M.D., M.R.C.P.L., has been appointed a Physician to the St. George Dispensary, Mount-street, Grosvenor-square, vice Sparks, resigned.

STEPHEN, J., M.B., C.M., has been appointed Medical Officer of Health for Peterhead, Aberdeenshire.

SWAN, R. J., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Gosberton District of the Spalding Union, vice Calthrop, deceased.

WATTIS, C. L., M.B., C.M., has been appointed Assistant Medical Officer and Dispenser to the Central London Sick Asylum District new Asylum, Cleveland-street.

YOUNG, P. P., L.S.A.L., has been appointed Resident Surgical Officer to the Charing-cross Hospital, vice Taylor, whose appointment has expired.

Births, Marriages, and Deaths.

BIRTHS.

BRAMWELL.—On the 28th ult., at Osborne-terrace, Newcastle-on-Tyne, the wife of Byrom Bramwell, M.B., of a daughter.

DEWAR.—On the 28th ult., at Sloane-street, S.W., the wife of John Dewar, L.R.C.P.Ed., of a son.

MACNAMARA.—On the 24th ult., at Grosvenor-street, London, the wife of N. C. Macnamara, Surgeon to the Mayo and Ophthalmic Hospitals, Calcutta, of a son.

MASON.—On the 29th ult., at Sudbury, Suffolk, the wife of W. Inglis Mason, M.R.C.S.E., of a daughter.

POTTER.—On the 27th ult., at George-street, Hanover-square, the wife of John B. Potter, M.D., of a daughter.

RHODES.—On the 24th ult., at Royal-terrace, Weymouth, the wife of Chas. Rhodes, M.D., of a son.

MARRIAGES.

PARK—MOORE.—On the 1st inst., at Blythswood-square, Glasgow, Robert Park, Surgeon, of Stewarton, Ayrshire, Scotland, to Agnes, youngest daughter of the late James Moore, Esq., of Clady, County Antrim, Ireland.—No Cards.

SIMPSON—LEISLER.—On the 25th ult., at St. James's, Birch-in-Rusholme, P. A. Simpson, M.D., Professor of Forensic Medicine in the University of Glasgow, to Frances Adelaide, daughter of John Leisler, Esq.

SKERRITT—HEELAS.—On the 2nd inst., at St. Paul's Church, Wokingham, Edward Markham Skerritt, B.A., B.S., M.D., of Leicester Villas, Clifton, to Mary Dora, eldest daughter of John Heelas, jun., of Woodlands, Wokingham.

DEATHS.

BELL.—On the 9th of Feb., at sea, between Borabora and Tahiti, Chas. N. Bell, M.R.C.S.E., aged 29.

CHAPMAN.—On the 30th ult., at Devon House, Isleworth, H. W. Chapman, F.R.C.S.E., aged 67.

DENNE.—On the 21st ult., Henry Denne, M.R.C.S.E., of Canterbury.

GIBBONS.—On the 15th of March, at Southsea, the beloved wife of John Gibbons, Surgeon-Major A.M.D. Deeply regretted by her husband and friends.

HAINSWORTH.—On the 28th ult., at Bradford, Yorkshire, Joseph Hainsworth, M.R.C.S.E., aged 40.

HALLETT.—On the 12th of April, at Shanghai, Lyttleton Hallett, M.R.C.S.E., aged 30.

LITTLE.—On the 27th ult., Emma, the beloved wife of John Caruthers Little, Surgeon, late of Boston, now of Pitchcombe House, near Stroud, Gloucestershire.

OAKSHOTT.—On the 25th ult., at Mount Verdant, Sundays Wells, Cork, J. G. Oakshott, M.R.C.S.E.

POWIS.—On the 22nd ult., at Ryde, Henry S. Powis, M.D., of Maidenhead, aged 64.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

Notes, Short Comments, and Answers to Correspondents.

PENNSYLVANIAN CERTIFICATES OF DEATH.

DR. J. BIRT DAVIS, Coroner, in summing-up the evidence in reference to the death of John William Cheslin, aged nine months, at Birmingham, who had been attended by Edwin Grayston, M.D. of Pennsylvania, made some important observations. Mr. Grayston had failed from Monday to Friday to see the child, and only at length saw it twenty minutes before its death. Thereupon he gave a certificate of death, signing himself M.D. The illegality of this procedure, on the strength of a foreign degree, to say nothing of the wretched character of that of Pennsylvania, is obvious. It was properly pointed out by the coroner, who seemed to indicate that some further use would be made of it. We sincerely trust that the coroner will make representations of this system both to the Registrar-General and the General Medical Council. We fear that the registrars, whether on instructions from head-quarters or not, are very much too loose in receiving such worthless certificates. The profession has a distinct right to object most emphatically to the reception of such certificates by registrars; and it is not too much to expect that the Medical Council should give authoritative and strong expression to this objection. It is not enough reply on the part of registrars to say that such deaths are registered as uncertified. They are, nevertheless, often registered on the strength of these certificates; whereas they should invariably be the subject of investigation as cases with no medical attendance, and the certificates should be treated as waste-paper, or rather as illegal documents.

A Student had better consult the Professor of Medical Jurisprudence at his own hospital on the subjects detailed in his communication to us.

Dr. G. Johnson's lecture shall be published, if possible, on June 12th.

"HOW SMALL-POX IS PROPAGATED."

To the Editor of THE LANCET.

SIR,—Under the above heading, in THE LANCET of May 22nd, I read with great surprise the following statement or quotation from a late report of Dr. Goldie, medical officer of health for Leeds:—"Prior to the disease breaking out in one household, a nurse had been obtained from Southampton for some of the young children. It was not known to whom she was related, or from what particular part of Southampton she came. On investigation it was found out that her mother was the matron of a small-pox institution; it was also found out by the medical attendant that some hampers of clothing &c. had been sent from the girl's relations. Without this chain of connexion it would have been difficult to have accounted for the infection of the family."

It will be seen by the above that it does not state when the small-pox first appeared in the family (no dates being given); but I have been informed by the mother and brothers of the young woman that the children were attacked with small-pox some six weeks since.

Now, Sir, I beg to state that there is not the slightest evidence to show that the cases of small-pox referred to were propagated, either directly or indirectly, from the hospital in Southampton. The facts are as follows:—In September, 1874, a foreign merchant vessel arrived at this port, having one of the crew affected by small-pox, and Mr. Bencraft, the port sanitary officer, ordered the patient to be removed to hospital by boat,* and placed under my charge. Finding the nurse or "matron" required assistance (although no other patient was in hospital), the daughter of the nurse was engaged *for one week*; but she was not permitted to see the patient or act as nurse. Previous to her leaving the hospital, the inspector disinfected her clothes by hot air and sulphurous acid gas in the chamber provided for the purpose. After returning home to her brother at Shirley, about two miles distant, she obtained a situation in a family residing in Leeds, and a period of about *seven months* must have elapsed before the small-pox broke out in the family. But, in addition to this long period of time, another attempt is made to show that some "hampers of clothing &c." had been sent from the girl's relations. On making inquiry of the mother and brother of the accused, I learn that nothing whatever, not even a letter, was sent by the mother to her daughter, and some of the clothes which she wore at the hospital were not taken away. The brother informed me by word and by letter that no clothes were sent to his sister; but at Christmas last he sent a small basket *from his own house*, containing a little fruit, mince-pies, &c., but no clothes. No case of small-pox occurred in the house of the brother, and the patient who was in hospital in September was discharged cured in October, and returned to his own country. From that time until the breaking out of small-pox in the family at Leeds no patient labouring under that disease was admitted to hospital, and no case occurred in the town to my knowledge.

If, then, the above quotation is correct, I would recommend Dr. Goldie to search for the cause of small-pox in Leeds at some other centre than the hospital at Southampton. Moreover, I would remind him that no medical officer of health or any member of the profession would, I am sure, venture to give publicity to the *suspected origin of small-pox* without first communicating with the medical officer of health or physician in charge of a hospital.

In conclusion, I would mention that I have attended all the cases of infectious diseases admitted to hospital, under the sanitary authority of this town, since the epidemic of small-pox in 1871, and no charge has been made against me of having permitted the infection to extend beyond the walls of the institution.

Your obedient servant,

HENRY OSBORN, M.R.C.P. Lond.,
Medical Officer of Health.

Southampton, May 29th, 1875.

* The Hospital for Infectious Diseases is in close proximity to the water.

FORTHCOMING SESSION OF THE FRENCH ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE.

OUT of the various towns which claimed the honour of being the seat of the next session of the Association, the city of Nantes on the Loire has been selected as offering every possible accommodation. The forthcoming session will, therefore, be held amidst the western districts, but within easy access of Paris and the other parts of France, and promises to be very successful. No exertion has been spared amongst the local authorities to render the session at Nantes as successful as the preceding ones at Lyons, Bordeaux, and Lille. The local Committee appointed to organise the meeting consists of 75 members. The Board includes, MM. Lechat, Mayor of Nantes; Lambert, President of the Court of Appeal of Rennes; Bobierre, Director of the School of Sciences; Dr. Laennec, Professor at the School of Medicine, &c. The Council of Administration of the Association has recently held several important sittings for the purpose of employing various sums of money possessed by the Association for scientific grants. Several of the scientific laboratories of France have thus received most useful grants of money through the successful working of this Association.

Mr. Brown Sim.—It shall receive due consideration.

DR. HARDWICKE.

To the Editor of THE LANCET.

SIR,—Dr. Hardwicke's attention has been drawn to an article in your journal of last week relative to his remarks at an inquest held lately at University College Hospital, and also to a letter on the same subject from one of the house-physicians of the hospital.

Dr. Hardwicke desires that it should be clearly understood that his remarks were not personally directed to one or any of the medical witnesses who appeared before him at the inquest in question; but that on reviewing the case, together with similar ones which had lately become subjects for inquiry, he strongly commented on the insufficient medical investigation which such cases had received, and the general absence of due care and caution which from time to time brings about such unhappy results, as the retention in a police cell of persons charged with drunkenness when suffering only from a state of insensibility produced by disease; and he further remarked concerning the general treatment of such persons by *all* those who had to do with them in similar language, referred to in your journal, and which, as custodian of the public life, he considered a growing evil merited.

Dr. Hardwicke further wishes me to add that he fully appreciates, and has frequently to comment on, the skill and attention which patients receive at the hands of the medical officers of public hospitals and institutions, and that he is fully aware of the difficulties of diagnosis in many forms of disease, especially when combined with drunkenness; but he also feels bound to say that many of the cases which have come before him, similar to the one under consideration, have not received that amount of careful investigation which might have led to a more correct diagnosis, and consequently more humane treatment of the case.

Dr. Hardwicke believes (as Dr. Richardson, F.R.S., some time ago suggested) that as the temperature in apoplexy is raised, and lowered in the coma following alcoholic poisoning, the thermometer would be of great aid in determining the nature of the case; but with regard to complicated cases, where the diagnosis is not readily or satisfactorily obtained, he would suggest that they should either be admitted to the hospital, or retained at the police station in a compartment specially fitted up for their reception, under the care of the divisional surgeon, until the true nature of the case revealed itself.

Much pressure from his public duties alone prevented Dr. Hardwicke from replying personally.—I am, Sir, faithfully yours,

G. DANFORD THOMAS,
Deputy Coroner for Central Middlesex.

June 1st, 1875.

*** It is much to be regretted that a coroner who can find time to make far too many injudicious and indefensible remarks should find himself so hard pressed when an explanation is required of him as to be obliged to leave this important duty to a deputy, who certainly has not succeeded in pulling his principal out of the mire. *Apropos* of a certain case—the case of the man Truby, which has been commented upon in the general press as well as by ourselves,—Dr. Hardwicke remarked that, "*in his opinion, the conduct of the medical officers of the hospital was simply atrocious.*" This could only refer to the officers of one hospital, and particularly to those who were brought in contact with the unfortunate man. It has been clearly shown that, on medical grounds, the coroner was in the wrong, and that his remarks were unwarrantable. Yet, when we appeal to him for an explanation, he replies through his deputy, "that his remarks were not directed to one or any of the medical witnesses who appeared before him," and, declining when brought to the point to fix upon any individual as worthy of censure, he goes on to state that *all* those who were brought in contact with the dying man were guilty of atrocious conduct. What we complain of is the use of the term "atrocious," and at present Dr. Hardwicke apparently wishes it to be understood that he does not in the least regret having employed it; that he was perfectly justified in using it; but that since he is unable to apply so foul an expression to any individual, he applies it to several individuals collectively, hoping thereby to escape the burden of justifying the use of it. Dr. Hardwicke's deputy then speculates as to the diagnostic power of the thermometer in cases of apoplexy and drunkenness. His remark on this head, however, is the merest speculation, and, in our present knowledge, would be as likely to lead towards error as towards truth. Nevertheless, medical officers who do not wish to be accused of atrocities will do well to use the thermometer in all cases which are likely to be investigated by Dr. Hardwicke, and perhaps in this way the coroner and the whole of the profession may gain a little real knowledge on the subject.—ED. L.

A MOTHER OF TWENTY-SEVEN CHILDREN.

AT a recent inquest held upon the body of a child, aged four years and a half, at Wraysbury, in Buckinghamshire, the principal witness was the mother of the child, who was stated to have had twenty-seven children! This woman is the wife of a labourer, with whom she appears some little time since to have been spending a day at Wraysbury fair, and not to have reached home till past midnight, when they found their cottage on fire, and the child suffocated. In evidence at the inquest it was incidentally mentioned that these people had had another child burned to death some years ago. Such carelessness in the family of an agricultural labourer, whose wife has borne him twenty-seven children, scarcely seems surprising. No mention was made at the inquest of the other twenty-five children; but it would be interesting to know how many of these, having escaped burning, had survived all the other ills incidental to the bringing of such a numerous progeny upon the wages of an agricultural labourer. At any rate the mother's health does not appear to have suffered much from her unusual feat, as she still has strength and inclination to spend a long day at that wearying entertainment, a country fair.

Inquirer, (Torquay.)—Yes. The late distinguished Chief Justice of the Court of Queen's Bench was the son of Dr. Thomas Denman, author of an "Essay on Puerperal Fever" and other works of merit.

Dr. Graily Hewitt's lecture shall be published in an early number.

ARMY MEDICAL DEPARTMENT.

To the Editor of THE LANCET.

SIR,—Will you kindly allow me space for a few remarks relative to the medical department of the army, to which I have the misfortune to belong?

I entered the department over eleven years ago, and at that time the junior surgeon (now surgeon-major) promoted had nine years' service, whereas at present the prospect of promotion is at some indefinite period after fifteen years. Leave of absence then appeared to be under much the same rules for medical officers as for combatant officers; but now under no circumstances can a doctor get more than sixty-one days in the year, and should he happen to be at a station where there is no other medical officer to take his duties, he is coolly told he must provide a substitute. A combatant officer can get fifteen months' leave from India, or, if his regiment be in England, he can have four or six months without any trouble; but for a medical officer such a thing is unheard of, not even after a term of foreign service. The distinction that is made with regard to sick-leave is, to say the least of it, disheartening. A medical officer goes home from India with his health broken down from the effects of climate and service; he gets four or six months' sick-leave, and if unable to return at the end of that time he is put on half-pay. A combatant officer gets almost unlimited sick-leave. One officer under my own observation, whose disease was neither contracted in nor by the service, nor from the effects of climate, was sent home sick; he got two years' sick-leave in England before he was asked to return, and half-pay was never mentioned to him.

The Royal Warrant under which I entered Her Majesty's service gave me a relative rank, which was to carry with it all advantages attached to the rank with which it corresponds; but it pleased Her Majesty's Secretary of State for War to issue a subsequent Royal Warrant, which deprived me of one of the principal advantages attached to this rank—viz., forage; in fact, this forage was at all times only a "blind," for a medical officer in India was never allowed to draw the forage allowance of his rank. I do not mean to say that a medical officer should draw forage for horses which he does not keep; but he should be allowed forage for the number of horses to which his rank entitles him, provided he keeps them available for the service.

A Royal Warrant was issued in 1867, which pretended to give us an increase of pay after five years' service, 12*s.* 6*d.* instead of 11*s.* 6*d.*; but would you be surprised to hear that I have not benefited one iota by that Warrant, for the simple reason that I came to India just when I had five years' service, and the Indian Government entirely ignored that increase of pay. I am at present receiving at the rate of 13*s.* a day English pay instead of 15*s.*, to which I am entitled. Nay, more; the Indian Government pay me that 13*s.* at the rate of one rupee for every half-crown, and at this present moment the value of the rupee is 1*s.* 9½*d.*, consequently the equivalent which I receive for each 2*s.* 6*d.* English pay is 1*s.* 9½*d.* It is as dishonourable for the Government to act in this way as it is for a private individual. I did not come into the service for the honour and glory of it. I came in to live by my profession, and the least I can expect from Government is that they will act justly towards me. I am not one of those unfortunates who the other day got ignominiously turned out of their regiments without any regard for their vested interests, expensive uniforms, or horse appointments, otherwise I might tell you more of the medical officer's grievances. I saw the storm in the distance, and exchanged my regiment for £160, and my chances of malaria and enlarged liver, and consequently saved myself the hardship of being turned out.

While Sir James Outram was on his death-bed he uttered these words to a distinguished officer: "It pains me to think that the services rendered by medical officers to the public have been so ill-requited, and that my efforts to obtain justice have been attended with so little effect." We are as far from justice now as in the days of Outram, and, in my opinion, it is to the head of our department we should be able to look for protection, and if he cannot secure it for us he should resign.

If we were to receive more sympathy from our seniors, there would be less difficulty in carrying out the unification scheme. I do not write with any hope of my wrongs being rectified. I have made up my mind to leave a service that has become as detestable to the doctor as the navy, and to change my life military for a life bucolic. To be a warning to others is the only object of,

Yours obediently,

Malariabad, April 4th, 1875. UN PAUVRE DIABLE.

VARIOLA AT BORDEAUX.

SEVERAL cases of variola recently occurred at Bordeaux, and the disease appeared to assume an epidemic form. It now, however, seems to be on the decline, the special hospital of Pellegrin receiving a less number of patients every day.

Mr. Read (Belfast) should consult his medical attendant.

POISONOUS SOCKS.

ANOTHER case of inflammation of the feet, caused by the wearing of socks with orange-red stripes, has occurred. The victim this time is Mr. Hart Dyke, the Conservative whip. We presume the offending dye is our old friend coralline, which gained such notoriety a year or so ago. It is impossible to avoid asking whether the sale of such dangerous articles cannot be stopped. The colour is attractive, and just now is fashionable, so we presume it is useless to caution the public against its use. Anyone, however, who has any respect for his "poor feet" would certainly be wise to avoid it.

Mr. Maurice G. Evans.—Gamgee: Our Domestic Animals in Health and Disease, 3 vols. small 8vo (Jack, Edinburgh). Dobson: The Ox, his Diseases, and their Treatment, 1 vol. small 8vo (Longmans). Fleming: A Manual of Veterinary Sanitary Science and Police, 2 vols. 8vo. If our correspondent's inquiry simply refers to horned cattle, Mr. Dobson's work will perhaps best meet his requirements.

THE letter of *Mr. Attesburrow* (Jersey) shall be kept in mind.

THE CURE OF LEPROSY.

To the Editor of THE LANCET.

SIR,—I have just received THE LANCET of Dec. 19th, in which there is an article on the Cure of Leprosy. In this the writer refers to my reports on Dr. Beauperthuy's treatment, and to Dr. Gavin Milroy's further reports thereon. Dr. Milroy, as quoted by the writer, says that though the results were most encouraging, inasmuch as "there was a marked diminution or *disappearance* of the tuberculated surfaces, and a more or less considerable restoration of sensibility in parts which had been once *completely anæsthetic*, yet to talk of a 'cure,' or the perfect recovery of sound health, would be a misuse of language."

It all depends on what people mean by the word "cure." It is not a scientific but a popular term, used by me (as I have before explained) in a report addressed officially to the Governor of Trinidad. It was intended to convey the popular idea, and to be used in the popular sense. In no other sense do I ever use it, and I do not think the word will ever be found in any paper of mine intended for the profession, as I never profess to "cure" anything, not even the itch or the ague. But I do say this, that if you cause the "disappearance of tuberculated surfaces," and "restoration of sensibility to parts once completely anæsthetic," you perform what the public call "a cure." If under certain treatment the fever of acute rheumatism disappears, the joints cease to be swollen and painful, and the patient is able to be about his business in a week, people would call such treatment a cure, and would not be so unreasonable as to expect that it or any other treatment would permanently protect the patient from the effects of cold, wet, or drink for the rest of his life. And so I say with regard to the Beauperthuy treatment. There are certain cases in the early stages of the disease in which I believe it to be a cure if carried out in its integrity—i. e., if the diet and hygienic condition of the patient be good; but it is quite improbable that it or any other treatment will ever prevent a strong hereditary tendency from manifesting itself under favourable conditions. I know this that the only case experimented on by me sufficiently long to effect a "cure" remained quite well three years afterwards. Here in Dunedin I have treated a slight case of anæsthetic leprosy with the Cashew nut oil with perfect success. The paralysis (for it is a paralysis, not merely an anæsthesia—motion as well as sensibility is lost) was "cured," and the fingers completely restored after being flexed and insensible for years.

I have only just received Dr. Milroy's report, and shall have further observations to make on it in a communication to the Secretary of State.

I am thankful to see that the efforts I made seven years ago to bring leprosy and its curability before the profession have been crowned with success, and that there is such a thorough awakening of the medical mind on the subject.

I am, Sir, your obedient servant,

Dunedin, New Zealand, March 17th, 1875. R. H. BAKEWELL, M.D.

M.D. St. Andrews.—It is often done by the holders of the qualification in question; but the practice is not commendable. There are, however, no grounds for instituting a prosecution, as our correspondent appears to suppose.

A Victim.—The person can only be prosecuted under the Medical Act if he uses false titles, or misleads the public into thinking that he is recognised by law as a physician, surgeon, or medical practitioner. He cannot, of course, recover in a court of law.

Dr. Carpenter (Croydon) is thanked for the invitation. A representative from THE LANCET will attend.

"PURIFICATION OF THE CAM."

To the Editor of THE LANCET.

SIR,—I have read with much satisfaction the annotation in your last issue on the condition of the river Cam. You refer especially to that portion of the river immediately below what is called the Bridge of Sighs. It might be called the bridge of dirty sights and bad smells. Your expressions, "utterly abominable," "disgusting," "indecent," and "offensive," are not a bit too strong. But had your correspondent gone down lower—that is, to the part below the boat-houses, and attended the boat races,—he would have seen such a churning up of sewage accumulated in the bed of the river, well described as an elongated cesspool, as only some thirty-eight oars, two or three barges, a deeply-laden screw steamer, and a fleet of tubs, canoes, &c., could produce, and all this in the May term, with summer weather. If it is so now, what it may and will be in August is best known to those who have the misfortune to spend that hot month in Cambridge.

It is reported that already many men are gone down, suffering from the baneful influence of this foul river. For some years attempts have been made towards purification; but they have failed through want of more knowledge how to accomplish it, and from fear of the cost, and consequently of heavily increased rates. But now, with the energetic medical officer of health to whom you refer, and by help of the Rivers Pollution Bill, we may say, "A good time coming; wait a little longer."—Yours truly,

Cambridge, May 24th, 1875. F. M. B.

CONCOURS FOR THE VICE-PROFESSORSHIP OF SURGERY AT THE PARIS SCHOOL OF MEDICINE.

A CONCOURS for the post of Vice-Professor of Surgery is now going on at the Faculty. The third test, that of delivering a lecture on a given subject, has just been concluded. The following is a list of the subjects chosen:—"Fractures complicated by Luxations"; "Luxations complicated by Wounds"; "Treatment of Amputation Wounds"; "Necrosis in Fractures"; "Strangulation in Surgery"; "Congenital Cataract."

Meteorologist, (Sunderland.)—We believe a pamphlet, recently published, compiled by Mr. G. J. Symonds, containing an account of the distribution of rain at some 1700 stations in the United Kingdom, will afford the information desired.

Dr. W. H. Day.—The paper has been received, and will be inserted shortly.

A CASE OF HIP-JOINT DISEASE.

To the Editor of THE LANCET.

SIR,—I shall feel obliged if any of your readers could tell me the best way to treat the following case. I wish to have the treatment of actual experience in similar cases, not untried suggestions.

A school-boy, aged ten years, with no history of struma in the family, was seen by me about seven weeks ago. I found an apparent shortening of the left lower limb to the extent of two inches; but on measurement this was found to be entirely due to obliquity of the pelvis, and if there were any real shortening at all it was only to the extent of about one-third or half an inch. On looking at the boy from behind when standing erect, there was a considerable lateral curvature of the body generally, causing a deep concavity of the right side; this being, of course, due to the patient throwing all the weight on to his right leg in order to ease the left one, and was only of value as being an evidence of pain or tenderness having existed in the left extremity. There was slight flattening of the nates on the left side, and the groove in the groin was somewhat deeper. On trying to flex or rotate the limb, I found anchylosis nearly complete, and it seemed to *give* a little, but that was all. There was no pain on reasonable manipulation, nor could it be elicited by the usual modes of percussion. The boy could walk without pain, but always lame, and with a fixed hip-joint. The only reliable history that could be got was that several weeks before the patient had been skating frequently "on one leg," the right one, and thus may have sprained the opposite joint. On putting him under chloroform, the whole anchylosis disappeared, but returned immediately on his recovering his senses, thus showing the union was muscular. I then put on, after consultation with another surgeon, a large blister over the joint, and kept the joint at rest by means of the long splint for three weeks. Since then I have used passive motion, and rubbed well with iodide of potassium liniment for another three weeks; the result being that the muscles are about as rigid as ever, the only improvement being that the boy maintains the upright posture better, and the apparent shortening is less, but the limb is wasting more than one can account for by the disuse.

I consider the case a somewhat rare one, and therefore have detailed it fully. I do not want to go through a series of theoretical remedies, and therefore seek information, both as to treatment and prognosis, from those of my brethren who have had a similar case to deal with. I may mention that, since taking the splints off, I have administered chloroform, with the same result as before. There is no actual anchylosis in fact, but a very firm one when not under the influence of anæsthetics.

I am, Sir, yours truly,

Middlesborough-on-Tees, May 31st, 1875. SAMUEL WALKER.

An Enquirer.—On referring to the published copies of the Medical Register—that is, from 1859 to 1874,—we find that the legal expenses incurred by the Medical Council have amounted to the sum of nearly £1400.

Dr. Steele, (Rome.)—We are much obliged by the receipt of an excellent and recent photograph of the distinguished Liberator. "Morgagni" shall appear next week.

Dr. Leonard Cane.—Probably next week.

MEDICAL PRACTITIONERS AND THE POLICE.

To the Editor of THE LANCET.

SIR,—There has been much recent discussion upon the necessity of calling a medical man to any person found by a policeman in a state of insensibility. I was called from my bed at midnight a few nights since by a policeman, who expressed a wish that I should come with him to examine a man he had picked up in the road, to see if he was injured or intoxicated. I went at his call. Finding on reference to Lotts's Diary that I was entitled to a fee of 7*s.* 6*d.* for a night visit in accordance with the police regulations, I sent in my claim to the Superintendent of Police, including also a charge for day visit to another police call. I enclose you his reply, from which it appears that if a medical man goes to examine a person intoxicated or otherwise at the request of a policeman, he must go gratuitously, unless the patient is a prisoner, which is rarely, if ever, the case.

Yours truly,

J. HENRY MORTON, L.R.C.P., &c.

New Brompton, Kent, May 31st, 1875.

P.S.—I may mention that people found by the police in this way are usually of the lower order, from whom, of course, no compensation can be obtained.

"Police Station, Chatham, 21st May, 1875.

"SIR,—I beg to acknowledge the receipt of your letter relative to your being called by the police to see a man and woman upon different occasions at New Brompton, and inform you, in reply, that it is not in my power to pay you, as neither the man or woman was a prisoner, but persons found by the police, and requiring medical aid. That being so, I think the proper persons to pay are those whom you attended; and I directed P.C. Young to call and tell you on receipt of your bill that I could not pay you, as your attendance was not upon police or prisoners, and I could not entertain any bills only under those headings.

"I am, Sir, your obedient servant,

"E. COPPINGER, Supr.

"Dr. J. Morton, High-street, New Brompton."

CASE OF CATALEPSY AT COCHIN HOSPITAL.

IN connexion with the famous Belgian case of Louise Lateau, it may be of interest to notice a case of catalepsy now under observation at the Hôpital Cochin, Paris. It is that of a hysterical woman, with alternate attacks of paralysis and contraction. The limbs when put in a certain position remain in it for a protracted period of time. The woman passes several days in a lethargic state, during which she takes no food, and presents marked insensibility of the skin and mucous membrane. The patient has already much improved under the influence of tonics and proper management.

Dr. Pierson, (Dresden.)—The article shall appear next week.

THE PHYSIQUE OF OUR CITIZEN SOLDIERS.

To the Editor of THE LANCET.

SIR,—It is satisfactory to see that so much attention has lately been directed to the question of the age, physical fitness, &c., of the recruits for our "regular forces," more especially with reference to their capability of enduring the hardships and fatigue of active service. It appears to me, Mr. Editor, that this inquiry might with great advantage be extended in the direction of our "auxiliary forces" also. In the *Standard* of May 11th I read: "Attempted murder at Stafford. John Mulligan, *aged sixteen*, a recruit in the 2nd Staffordshire Militia," &c. &c. Boys of *sixteen* are hardly suitable for soldiers! Again, without in the least wishing to detract from the just respect entertained for our "citizen soldiery," will you permit me to remark that I have seen in some corps striplings, and men (to my mind) far too old for active duties or much fatigue, and yet wearing the badge of extra-efficiency or efficiency, although I must say a good proportion of the members are men of good, often very good, physique indeed; but as "the strength of a chain is equal to that of its weakest link" only, would it not be well to endeavour to secure that *every* link should, as far as possible, be equal to the strain of war? I would, therefore, suggest that no man be borne on the extra-efficient or efficient list who was under twenty, or above forty-five or fifty years of age, and who had not a fair chest girth in proportion to his height; also, that they should be carefully inspected by the medical officer of the corps, to certify to freedom from any disease or impediment which would be likely to interfere with the efficient performance of any duties expected in event of war. Members not up to the physical standard of efficiency, or under or above proper age, would be useful for the defence of forts &c, and could be borne on a separate list. Were this done, the authorities would know *where* to lay their hands on "good men and true" when wanted. There are many difficulties, I know, in the way of carrying out such a plan; but as I believe our "citizen soldiery" are *all* most anxious to make themselves as efficient as they possibly can, so as to be ready to defend their "hearths and homes," I am sure that the *patriotism* of all parties concerned would enable any such difficulties to be surmounted.

I remain, Sir, yours &c.,

May, 1875. ANTISEPTIC.

M. B. H.—Our correspondent must be a better judge than we can be in the matter. The nature of the case and the custom of the neighbouring practitioners must be considered.

UTERINE SLOTH.

To the Editor of THE LANCET.

SIR,—The following case of what, for conciseness, I have designated "uterine sloth" may probably be interesting, and I should be glad of your opinion or that of any of your readers as to how far I was justified in the treatment adopted.

I was sent for to E. B——, aged thirty-three, living in a lone country place. She is of delicate habit of body, of a sanguineo-lymphatic temperament, and was in labour with her seventh child. I arrived at the cottage about 9.30 P.M., and found that she had had irregular pains all day. A portion of the liquor amnii was discharged, and the os uteri fairly dilated. The presentation was natural, and the pains remarkably sluggish. These were so far quickened by the action of ergot and brandy, and by changes of posture, that about one A.M. I could fairly grasp the child's head; but the spontaneous expulsive action of the uterus was gradually diminishing. Had the placenta presented, or had there been hæmorrhage, I should not have hesitated about the operation of turning. The time and place were unfavourable for seeking consultation, and I did not think it well to go on artificially stimulating the uterus, as one might spur a lazy horse, and I could not succeed in applying the forceps, as the head was so high up. Though there was no immediate apprehension of the patient sinking from nervous exhaustion, I feared there might be, and so resolved upon turning. This I did without any particular difficulty; but so inactive was the uterus, even then, that the operation of extracting the child was as if it were being extracted from a corpse.

I suppose, according to the theory of midwifery teaching, I ought to have waited till the head was sufficiently low to admit of extraction by the forceps; but as no untoward symptom supervened, as mother and child both did well, and as "nothing succeeds like success," I presume I may put forth this case as a wholesome lay illustration of the suspicious theological dogma, "Ex tus acta probat." Yours truly,

Ludlow, May 15th, 1875. HENRY MEYMOTT.

OBSTETRIC CUSTOMS.

To the Editor of THE LANCET.

SIR,—Your correspondent, "J. B.," will, perhaps, be surprised to learn that the custom of being confined with all the clothes on is almost universal in London, even among better-class people, and, for my part, I cannot recollect any harm from it. As your correspondent remarks, it is an inconvenient custom; but a medical man, who has his living to get by his practice, must not protest too much, or he might find himself voted fidgety, and superseded next time.

There is another obstetric custom, peculiar, I believe, to the metropolis, which is not only inconvenient, but to a certain extent derogatory—namely, "tipping" the nurse with the odd shilling; but then "Sairy Gamp" has a good deal in her power, and is, perhaps wisely, to be propitiated.

I am, in deep disgust,

London, June, 1875. X. Y. Z.

M.R.C.S. Eng.—The representative of the Royal College of Surgeons of England on the General Medical Council is Mr. Richard Quain, F.R.S. The appointment (which has always been quinquennial) will expire next month (July). The former representatives were, Mr. Joseph Henry Green, Mr. James Moncrieff Arnott, and Mr. Cæsar Henry Hawkins.

Dr. J. T. Luce.—The point is a legal rather than a medical one, turning simply on the terms of the contract.

Mr. Murdoch Brown.—Thanks.

CARBOLIC ACID IN SYPHILIS.

To the Editor of THE LANCET.

SIR,—Allow me to say a few words in reference to carbolic acid in the treatment of syphilis. For some time past I have cauterised chancres with pure carbolic acid, and the result has always been that they have healed without constitutional symptoms. It is of no use except at the very commencement. My way is as follows:—Whenever I see a patient with the slightest appearance of what I believe to be a chancre, I take pure crystallised carbolic acid, and warm it; then, after dipping a piece of twisted paper into the warmed acid, I cauterise the sore on the penis—viz., in the same way as if I were using nitric acid. Next time I see the patient I find nothing more than the irritation produced by the carbolic acid, and he gradually gets well. Unfortunately my cases have been few, so I may be wrong. All I wish is to ask Mr. Lister, and the army and navy medical officers, who have ample opportunity of testing the truth of my observation, to see if there is any fallacy in my statement.

I am, Sir, yours faithfully,

H. DICKSON, Resident Surgeon.

Stapleton Asylum, near Bristol, May 25th, 1875.

Mr. Maunder.—It is a pity that a good paper should be buried in the catacombs of the Society.

Dr. Spencer Cobbold.—We will endeavour to publish the lecture on Hydatid Disease the week after next.

CORRIGENDUM.—In Mr. O. Foster's letter on "Dangers in Midwifery Practice" (page 780 of our last issue), the writer thinks that his meaning would be rendered clearer by substituting the words "after a surgical case" for "after touching a woman."

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from — Prof. Bentley, London; Dr. George Johnson, London: Mr. Henry Smith, London; Dr. Grailly Hewitt, London; Dr. C. Theodore Williams, London; Dr. Yeo, London; Dr. Cane, Peterborough; Dr. Day; Mr. Keene; Dr. M. Brown, Edinburgh; Mr. Clutton; Dr. Macnamara, Dublin; Rev. Mr. Tringham, Godalming; Dr. Murray, London; Dr. Diver, Southsea; Mr. Robinson, Dublin; Dr. Mackintosh; Mr. Sargeant, London; Dr. Carr, London; Mr. Charlton; Mr. Parsons, Barking; Mr. Stocker, London; Dr. Tuke, Edinburgh; Dr. Wadham, London; Mr. Arnison; Dr. Pierson, Dresden; Dr. Cotton, London; Mr. Wilson, Edinburgh; Surgeon Martin, Mooltan; Mr. Groves, London; Dr. Bacon, Fulbourn; Mr. Hyatt; Mr. P. O. Jones, Bristol; Mr. Walker, Middlesborough-on-Tees; Dr. Ashe, Londonderry; Mr. Vincent, Barrow-in-Furness; Mr. Attenburrow, Jersey; Mr. Foster; Dr. Fawcett; Dr. Evans, Cardiff; Mr. Maunder, London; Dr. Osborn, Southampton; Dr. Bird; Mr. Wilson, Huddersfield; Mr. Reade, Belfast; Mr. Fleming, Glasgow; Mr. Curran; Mr. Renton, Hamilton; Dr. Playter, Toronto; Dr. Heffernan, Jarrow; Mr. Radford, Ben Rhydding; Dr. Luce, Stratford-on-Avon; Messrs. Richardson and Co., Leicester; Mrs. Hunter, Cheadle; Dr. Graham, Tottenham; Mr. Rossiter, London; Mr. Swinson, Leamington; Mr. Moulding, Liverpool; Mr. Prosser, Birmingham; Dr. Howley, St. John's, Newfoundland; Dr. Alban, Ohio, U.S.A.; Mr. Boslet, Brighton; Dr. Percy Leslie, London; Dr. Cassells, Glasgow; Mr. Kemp, London; Messrs. Leader and Sons, Sheffield; Mr. Wright, Liverpool; Mr. Simpson, Cardiff; Dr. Philpot, London; Dr. Morton, New Brompton; Mr. M'Gill, Leeds; Messrs. Krohne and Sesemann, London; Mr. Brown, Brighton; Mr. Terry, Bradford; Mr. Harrison, Ambleside; Mr. Garner, London; Mr. Austin, Thurso; Mr. Lewes, Bath; Dr. Sharpe, Norwood; Mr. Hill, Burton-on-Trent; Dr. Pickles, Leeds; Mr. Vogl, London; Mr. Stead, London; A Student; P. B. S.; Sanitary Enquirer; W. G. G.; B. G. H.; W.; A Constant Reader; L.M.; M. B. H.; X. Y. Z.; A Victim; &c. &c.

LETTERS, *each with enclosure*, are also acknowledged from—Dr. Woodward, Worcester; Mr. Daniell, Derby; Dr. Crothers, Hexham; Mr. Lumsden, Blackhill; Mr. M'Kenna, Farnborough; Mr. Sampson, York; Mr. Jones, Llanfyllin; Mr. Lockwood, Westgate; Mr. Brooke, Langport; Mr. Webb, Ramsgate; Mr. Beckett, Ely; Dr. Bolton; Prof. Humphry, Cambridge; Mr. Sewell, Darlington; Mr. Thomas, Manchester; Mr. Wilkinson, Barrow-in-Furness; Dr. Whitehead, Eastbourne; Mr. Willey, Birmingham; Dr. Hitch, Hastings; Mr. Hughes, Dinas Mawddwg; Dr. Aveling, London; Mr. White, Norwich; Mr. Le Page, Brandon; Dr. Wyllie, Scarborough; Mr. Atkins, Chorlton; Mr. Parry, Attercliffe; Mr. Eadon, Saltburn; Mr. Williams, Abertillery; Dr. Bell, Preston; Mr. Jackman, Lymington; Mr. Day, Cwm Brân; Mr. Browne, Hackney; Dr. Bramwell, Newcastle; Dr. Highmore, Sherborne; Mr. Jones, Southend; Mr. Ingle, Brighton; Mr. White, London; Mr. Thomas, Brockley; Dr. Prestwich, Oldham; Dr. Spiers, Haltwhistle; Dr. Hargreaves, Sheffield; Dr. Sharp, Truro; Dr. Young, Yarm; A. C. L., Brompton; J. R., Finsbury.

Western Morning News, Manchester Guardian, Local Government Chronicle, Stratford-on-Avon Herald, Welshman, Cork Constitution, Newcastle Daily Chronicle, Surrey Advertiser, Liverpool Daily Post, East London Observer, Metropolitan, Huddersfield Daily Chronicle, Isle of Man Times, and *Derbyshire Times* have been received.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, JUNE 3RD, 1875.

Date	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rainfall.	Remarks at 8 A.M.
May 28	29·89	N.W.	52	57	86	65	52	...	Overcast
„ 29	29·79	N.N.E	48	50	78	56	49	0·27	Raining
„ 30	29·92	N.E.	45	52	102	64	45	...	Cloudy
„ 31	30·02	S.E.	47	52	99	66	43	...	Overcast
June 1	30·14	E.	51	55	109	75	47	...	Overcast
„ 2	30·14	E.	51	61	112	77	52	...	Fine
„ 3	29·96	E.	58	65	...	...	56	...	Fine

Medical Diary for the ensuing Week.

Monday, June 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. General Monthly Meeting.
ST. PETER'S HOSPITAL.—3 P.M. Expected Operations: Lithotrity and the Boutonnière.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Henry Lee, "On Syphilis, and on some Local Diseases affecting principally the Organs of Generation."
ODONTOLOGICAL SOCIETY OF GREAT BRITAIN.—8 P.M.

Tuesday, June 8.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.

Wednesday, June 9.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Henry Lee, "On Syphilis, and on some Local Diseases affecting principally the Organs of Generation."
EPIDEMIOLOGICAL SOCIETY.—8 P.M. Mr. J. Netten Radcliffe, "On the Reappearance of Plague."

Thursday, June 10.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Friday, June 11.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Prof. Henry Lee, "On Syphilis, and on some Local Diseases affecting principally the Organs of Generation."

Saturday, June 12.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

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